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U.S. DEPARTMENT OF THE INTERIOR
March 3 1849

I 19.53/2: AK-86-1

Water Resources Data Alaska

Water Year 1986

619-E-2

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AK-86-1
Prepared in cooperation with the State of Alaska
and with other agencies

COMPLETED

ORIGINAL

CALENDAR FOR WATER YEAR 1986

3

1985

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U.S. DEPARTMENT OF THE INTERIOR
March 3 1849

Water Resources Data
Alaska
Water Year 1986

by J.L. VanMaanen, R.D. Lamke, P.J. Still, J.E. Vaill, and B.B. Bigelow

U.S. GEOLOGICAL SURVEY WATER-DATA REPORT AK-86-1
Prepared in cooperation with the State of Alaska
and with other agencies

BEST COPY AVAILABLE

UNITED STATES DEPARTMENT OF THE INTERIOR

DONALD PAUL HODEL, Secretary

GEOLOGICAL SURVEY

Dallas Peck, Director

For additional information write to
District Chief, Water Resources Division
U.S. Geological Survey
4230 University Drive -- Suite 201
Anchorage, Alaska 99508 - 4664

1988

PREFACE

This volume of the annual hydrologic data report of Alaska is one of a series of annual reports that document hydrologic data gathered from the U.S. Geological Survey's surface- and ground-water data-collection networks in each state, Puerto Rico, and the Trust Territories. These records of stream-flow, ground-water levels, and water quality provide the hydrologic information needed by state, local, and federal agencies, and the private sector for developing and managing our Nation's land and water resources.

The report is the culmination of a concerted effort by dedicated personnel of the U.S. Geological Survey who collected, compiled, analyzed, verified, and organized the data, and who typed, edited, and assembled the report. The authors had primary responsibility for assuring that the information contained herein is accurate, complete, and adheres to Geological Survey policy and established guidelines. Most of the data were collected, computed, and processed from subdistrict offices. Chiefs-in-charge of the subdistrict offices are:

Larry S. Leveen, Anchorage
Robert L.Burrows, Fairbanks
Harold R. Seitz, Juneau

The data were collected, computed, and processed by the following personnel:

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This report was prepared in cooperation with the State of Alaska and with other agencies under the general supervision of Philip A. Emery, District Chief and T. John Conomos, Regional Hydrologist, Western Region.

REPORT DOCUMENTATION PAGE	**1. REPORT NO.** USGS/WRD/HD-88/214	**2.**	**3. Recipient's Accession No.**

4. Title and Subtitle

Water Resources Data for Alaska, Water Year 1986

5. Report Date

February 1988

6.

7. Author(s)

J.L. VanMaanen, R.D. Lamke, P.J. Still, J.E. Vaill, and B.B. Bigelow

8. Performing Organization Rept. No.

USGS-WDR-AK-86-1

9. Performing Organization Name and Address

U.S. Geological Survey, Water Resources Division
4230 University Drive - Suite 201
Anchorage, Alaska 99508 4664

10. Project/Task/Work Unit No.

11. Contract(C) or Grant(G) No.

(C)

(G)

12. Sponsoring Organization Name and Address

U.S. Geological Survey, Water Resources Division
4230 University Drive - Suite 201
Anchorage, Alaska 99508-4664

13. Type of Report & Period Covered

Annual -- Oct. 1, 1985
to Sept. 30, 1986

14.

15. Supplementary Notes

Prepared in cooperation with the State of Alaska and with other agencies

16. Abstract (Limit: 200 words)

Water resources data for the 1986 water year for Alaska consist of records of stage, discharge, and water quality of streams; stage and water quality of lakes; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 103 gaging stations; water quality at 42 gaging stations; and water levels for 30 observation wells. Also included are data for 18 low-flow, 68 crest-stage, and 18 water-quality partial-record stations and 40 lakes. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Alaska.

17. Document Analysis a. Descriptors

*Alaska, *Hydrologic data *Surface water, *Ground water, *Water quality, Flow rate, Gaging stations, Lakes Chemical analyses, Sediments, Water temperatures, Sampling sites Water levels, Water analyses.

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement: No restriction of distribution This report may be purchased from: National Technical Information Service Springfield, VA 22161	**19. Security Class (This Report)** Unclassified	**21. No. of Pages** 338
	20. Security Class (This Page) Unclassified	**22. Price**

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GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

[Letter after station name designates type of data: (d) discharge, (c) chemical, (m) microbiological, (t) water temperature, (s) sediment, (e) elevation, gage height, or contents]

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GAGING STATIONS, IN DOWNSTREAM ORDER, FOR WHICH RECORDS ARE PUBLISHED

[Letter after station name designates type of data: (d) discharge, (c) chemical, (m) microbiological, (t) water temperature, (s) sediment, (e) elevation, gage height, or contents]

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INTRODUCTION

Water resources data for the 1986 water year for Alaska consist of records of stage, discharge, and water quality of streams; stage and water quality of lakes; and water levels and water quality of ground-water wells. This volume contains records for water discharge at 103 gaging stations; water quality at 42 gaging stations; and water levels for 30 observation wells. Also included are data for 18 low-flow, 68 crest-stage, and 18 water-quality partial-record stations and 40 lakes. Additional water data were collected at various sites not involved in the systematic data-collection program and are published as miscellaneous measurements and analyses. These data represent that part of the National Water Data System operated by the U.S. Geological Survey and cooperating State and Federal agencies in Alaska.

Records of discharge and stage of streams, stage of lakes, chemical quality, water temperatures, and suspended sediment were first published in U.S. Geological Survey Water-Supply Papers. Through September 30, 1960, these data were published in seven Water-Supply Papers entitled, "Quantity and Quality of Surface Waters of Alaska" (through 1950, 1951-53, 1954-56, 1957, 1958, 1959, 1960). Since 1960, streamflow records and related data were published in a five-year series of Water-Supply Papers for 1961-65 and 1966-70 entitled, "Surface Water Supply of the United States." Water-quality records were published in a Water-Supply Paper entitled "Quality of Surface Waters of Alaska, 1961-63" and after then until 1970 in an annual series of Water-Supply Papers entitled, "Quality of Surface Waters of the United States." Records of ground-water levels were published from 1949 to 1974 in a series of Water-Supply Papers entitled, "Ground-Water Levels in the United States." Water-Supply Papers may be consulted in the libraries of the principal cities in the United States or may be purchased from Branch of Distribution, U.S. Geological Survey, 604 South Pickett Street, Alexandria, Virginia 22304.

For water years 1961 through 1970, streamflow data were released by the Geological Survey in annual reports on a State-boundary basis. Water-quality records for water years 1964 through 1970 were similarly released either in separate reports or in conjunction with streamflow records.

Beginning with the 1971 water year, water data for streamflow, water quality, and ground water are published in official Survey reports on a State-boundary basis. These official Survey reports carry an identification number consisting of the two-letter State abbreviation, the last two digits of the water year, and the volume number. For example, this report is identified as "U.S. Geological Survey Water-Data Report AK-82-1." These water-data reports are for sale, in paper copy or in microfiche, by the National Technical Information Service, U.S. Department of Commerce, Springfield, VA 22161.

Additional information, including current prices, for ordering specific reports may be obtained from the district chief at the address given on the back of the title page or by telephone (907) 271-4138.

COOPERATION

The U.S. Geological Survey and organizations of the State of Alaska have had cooperative agreements since 1958 for the systematic collection of streamflow records, water-quality records, and ground-water levels. Organizations that assisted in collecting data through cooperative agreement with the Survey are:

Alaska Department of Natural Resources, E. C. Wunnicke, Commissioner
Alaska Power Authority, Robert Heath, Executive Director
Alaska Department of Transportation and Public Facilities in cooperation with the Federal
    Highway Administration, U.S. Department of Transportation, R. J. Knapp, Commissioner
Alaska Department of Fish and Game, D. C. Collingsworth, Commissioner
Municipality of Anchorage, Tony Knowles, Mayor
City and Borough of Juneau, N. L. Teague, City-Borough Manager
Fairbanks North Star Borough, B. B. Allen, Mayor
Kenai Peninsula Borough, S. F. Thompson, Mayor
Matanuska-Susitna Borough, Gary Thurlow, Borough Manager
City of Petersburg, Richard Underkofler, City Manager
City and Borough of Sitka, R. G. Anderson, Administrator

Assistance in the form of funds or services was given by the following federal agencies for information published in this report: Corps of Engineers, U.S. Army, for 17 gaging stations and 2 water-quality station; Forest Service, U.S. Department of Agriculture, for 9 gaging stations and 6 water-quality stations.

Organizations that supplied data are acknowledged in station descriptions.

SUMMARY OF HYDROLOGIC CONDITIONS

Surface Water

Streamflow for the 1986 water year generally was below normal south of the Alaska Range and above normal in the Yukon River basin and northward. Yearly flows at one third of the long-term gaging stations in Alaska (those with 10 or more years of record) were deficient (in the lowest 25 percent for the period of record). Streams in Southeast Alaska with deficient flows were Harding River near Wrangell (35 years), Fish Creek near Ketchikan (68 years), and Old Tom Creek near Kasaan (37 years). Half of the long-term stations in South-central Alaska had deficient flows for the water year. They were:

Station name	Record length (years)	Station name	Record length (years)
Copper River near Chitina	31	Matanuska River at Palmer	25
Power Creek near Cordova	39	Little Susitna River near Palmer	38
Barbara Creek near Seldovia	14	Susitna River at Gold Creek	37
Campbell Creek near Spenard	20	Talkeetna River near Talkeetna	22
Ship Creek near Anchorage	40		

Deficient yearly flow also occurred during 1986 at Kuskokwim River at Crooked Creek (35 years) and Hess Creek near Livengood (12 years).

Statewide, flows in the 1986 water year were excessive (in the highest 25 percent for the period of record) at Hamilton Creek near Kake (10 years) in Southeast Alaska, Yukon River at Eagle (38 years) and Middle Fork Koyukuk River near Wiseman (11 years) in the Yukon River basin, Snake River near Nome (20 years) in Northwest Alaska, and Nunavak Creek near Barrow (15 years) and Putuligayuk River near Deadhorse (14 years) in Arctic Slope Alaska. The annual flow was the highest of record at Hamilton Creek and Putuligayuk River and the second highest of record at Middle Fork Koyukuk River, Snake River, and Nunavak Creek. Monthly and annual mean discharge for the 1986 water year are compared with median runoff for their period of record at six representative long-term stations as shown in figure 1.

Streams in southeastern Alaska generally had deficient flows in October and November 1985. November flows were the lowest of record for the month at more than one half of the long-term gaging stations; November flow at Fish Creek near Ketchikan (the longest record in the state) was the third lowest in 68 years. In contrast, December streamflows were the highest of record at more than half of the long-term stations. Monthly flows for December and January were the highest of record at Hamilton Creek and it was the only stream in the region with excessive yearly flow. Above normal flows continued through March in all of Southeast Alaska with the highest March flows of record at half the long-term sites; Fish Creek flows were the highest of record for the month. Flows in the remainder of the water year from April through September tended to become below normal and deficient in September. September flows were the lowest of record at Kadashan River above Hook Creek (16 years) and Tonalite Creek (18 years), both near Tenakee.

Streamflow trends throughout the year in South-central Alaska tended to be similar to those in southeastern Alaska with the exception that streams in the Little Susitna and Susitna River basins had excessive October flows. Record November low flows occurred at Power and Barbara Creeks and record December high flows occurred at Power Creek and Kenai River at Cooper Landing (39 years). The December high flow on the Kenai River was caused by the unseasonable breakout of a glacier-dammed lake at the head of Snow River. Generally, below normal or deficient monthly flows occurred from March through September throughout the South-central area. However, the April flow at Chuitna River near Tyonek (11 years) was the highest of record and the May flow was above normal because of the locally heavy snowpack. The general streamflow pattern for the year continued into Southwest Alaska, except that October 1985 and September 1986 flows were above normal or excessive.

Within the Yukon River basin, the streamflow trend was for excessive or above normal flows during the first half of the water year, October through March, and for below normal flows at some stations in the April through June third quarter. Precipitation caused excessive flows at most stations sometime (usually in August) during the last quarter of the water year.

The highest wintertime monthly flows of record occurred at many long-term sites in the Yukon River basin and Northwest Alaska. Stations with one or more months of flow that were record high monthly flows (in October through March) throughout their period of record are tabulated below:

	Record length (years)		Record length (years)
Boulder Creek near Central	18	Chena River at Fairbanks	38
Tanana River near Tanacross	33	Tanana River at Nenana	24
Salcha River near Salchaket	38	Yukon River at Pilot Station	11
Tanana River at Fairbanks	13	Snake River near Nome	20
Chena River near Two Rivers	19	Kobuk River near Kiana	10
Little Chena River near Fairbanks	20		

The highest monthly flows during September for the period of record occurred at Middle Fork Koyukuk River and Nunavak Creek. June and September monthly flows were the highest of record at Putuligayuk River.

There were no outstanding floods except that the breakup peak at Putuligayuk River on June 17 was the highest during the period of record. Similarily, the July 22 peak on the Tanana River at Fairbanks was the highest during its short period of record; however, it was considerably lower than the 1967 flood peak. It has been several years since peaks as great as those experienced during the 1986 water year in the Chena River basin have occurred. Also, the September 7 peak at Kobuk River gage was unusually high for that time of the year; the effect on the monthly flow is shown in figure 1.

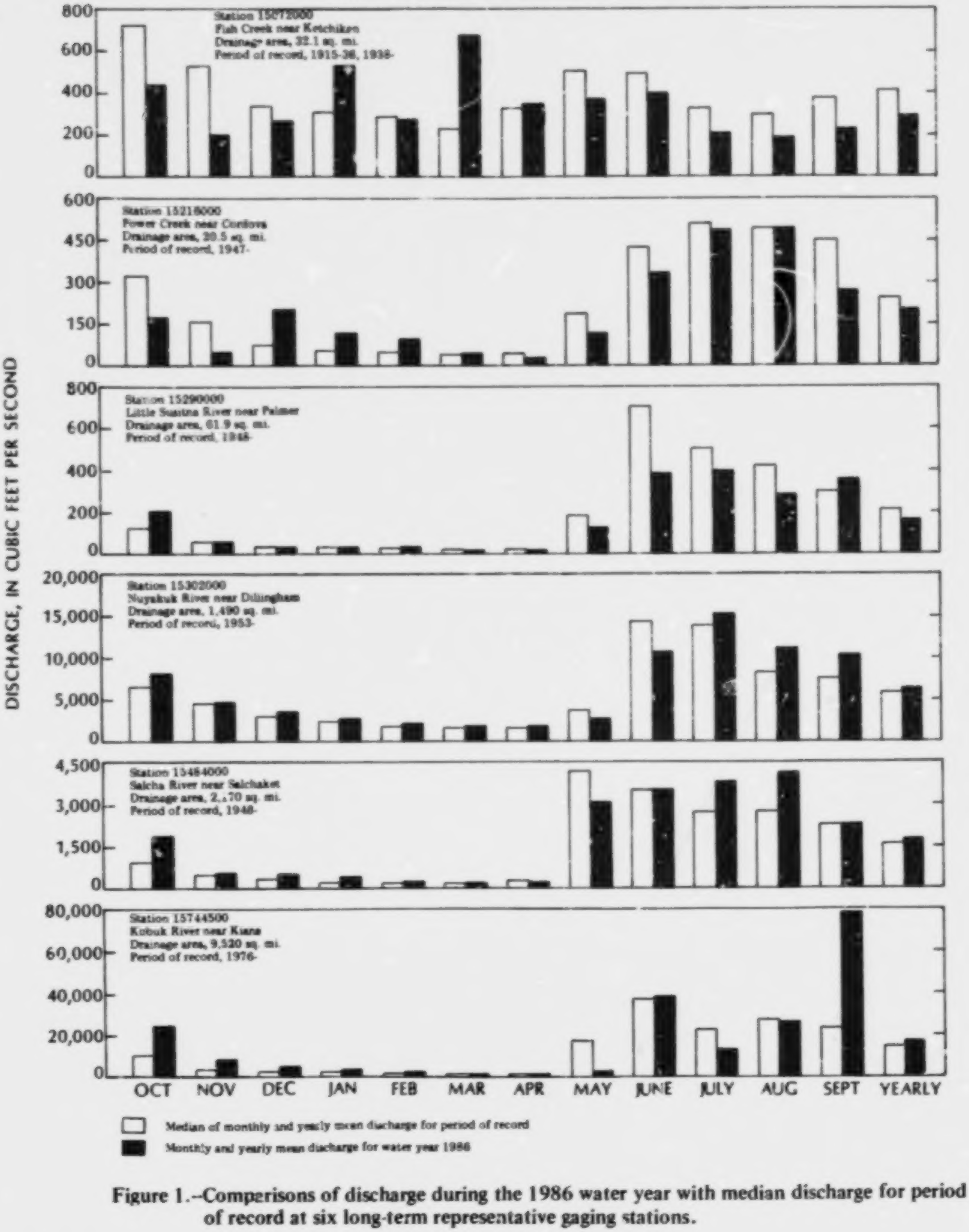

Figure 1.--Comperisons of discharge during the 1986 water year with median discharge for period of record at six long-term representative gaging stations.

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Surface-Water Quality

Information on the concentration and composition of Alaskan surface water is markedly variable in coverage. Some subregions have had regular or periodic sampling extending for many years at many stream points and at a number of lakes. Surface water in other subregions is represented by only a few miscellaneous samples. Although the chemical characteristics of water in the streams and lakes of Alaska seem variable, the ranges in concentration are not as large as found in the conterminous United States. Most Alaskan streams above tidal reaches contain water of a calcium bicarbonate type generally containing less than 200 mg/L dissolved solids. In these streams the hardness generally increases with increased dissolved-solids content. The streams draining lowlands and intermontane basins usually contain harder water than the streams in the higher mountains. Some streams, especially those draining areas overlain by organic-rich deposits, can have excessive iron content.

The water in lakes in Alaska is more variable in mineral content than in the rivers. The water in some mountain lakes is very low in dissolved-solids content, and is little more concentrated than rainwater. Other lakes occupying lowlands near the sea, including many near the Arctic Coastal Plain, have become mineralized periodically by salts from the sea brought in either by overland flooding during storms or as ocean spray. The water in lakes in the lowlands remote from the sea is often very similar in chemical character to water in the larger rivers adjacent to them.

In Alaska the character and distribution of suspended sediment is relatively complex because of the contribution by glaciers of large amounts of very fine material (glacial flour) to many streams. In general, nonglacial streams transport less than 100 mg/L of suspended sediment during the summer in contrast to as much as 2,000 mg/L for glacial streams. Nonglacial streams often transport their highest concentration during the spring melt or during periods of heavy rainfall, whereas glacial streams transport their highest concentration during heavy melt water, usually in middle or late summer. The normal suspended-sediment concentration between January and April is about 20 mg/L or less for all streams. Less than 15 percent of the annual sediment load is carried during this period. The percentage of material finer than 0.062 mm (millimeter) (the silt-clay fraction as generally defined) transported by nonglacial streams is less than 50 percent in contrast to more than 50 percent for glacial streams.

Many large streams in Alaska result from a combination of glacial and nonglacial tributaries and accordingly transport suspended sediment that in its particle-size distribution and concentration reflects its dual origin.

Placer mining activities on many small streams in Alaska have resulted in increased concentrations of suspended sediment and in some cases in changes in stream channel configuration. The effects of placer mining on the large anadromous fish population is of continuing concern to resource management agencies.

In the City of Anchorage, coliform bacteria concentrations in the Little Campbell Creek drainage often exceed the State water quality limit and at certain times of the year the stream is closed to recreational use. The City has recently initiated a major effort to identify pollution sources and develop control methodologies to improve the stream's water quality.

GROUND-WATER LEVELS

Alaska's vast area and small population preclude a comprehensive evaluation of its ground-water resources. Throughout much of the state, aquifers are not defined accurately but are only generalized as being alluvium or bedrock. In many areas, wells have not been drilled, and little is known about seasonal or long-term changes in ground-water storage. Observation wells (See fig. 6 for location of observation wells.) that are being monitored are generally in the more urbanized areas where pumping is stressing the aquifers or where a future stress is anticipated.

In the Fairbanks area, ground-water levels in the alluvial plain of the Chena and Tanana Rivers reflect seasonal changes in stage of the rivers and do not vary more than about 6 ft, even in areas of heavy pumping. In the nearby uplands changes in ground-water levels are highly variable, but most of the wells in the Geological Survey's network continued to show a regional decline that has been typical of the past decade.

In the Anchorage area, where the most intensive development of ground water has occurred, the seasonal pattern of water-level fluctuations is partially obscured by the effects of pumping. The combined effects of increasing ground-water withdrawals for public and private supplies is reflected by a general long-term decline in water levels in some areas. In recent years, this decline has been most pronounced in the Hillside area of south Anchorage.

Records tabulated in this report indicate that, over the course of Water Year 1986, water levels rose slightly in observation wells in Southeast Alaska, the Valdez-Cordova area, and on the Kenai Peninsula.

Ground-Water Quality

Much of the ground-water withdrawal in Alaska occurs within the Municipality of Anchorage where more than one-half the State's population resides. The other major areas of large-scale ground-water us are the Tanana River valley in interior Alaska, including the City of Fairbanks, and the industrial complex on the Kenai Peninsula.

Outside of the major urban areas almost all ground water is obtained from the unconsolidated aquifers. Most of the sampled water contains less than the State's recommended limit of 500 mg/L dissolved solids. Calcium and magnesium, which contribute to the hardness of water, along with bicarbonate are the major dissolved ions. In most of these wells hardness concentrations are about 60-80 percent of the dissolved solids concentration. Water of sodium bicarbonate or sodium chloride type is present in numerous community wells drilled near the coast.

Iron is present in objectionable concentrations in a large portion of shallow wells in most areas of the state. Concentrations in excess of 1.0 mg/L are common. Iron concentrations of more than about 0.3 mg/L can cause staining of laundry and plumbing fixtures and impart an unpleasant taste to the water.

One of the few areas of Alaska where natural ground-water quality could be considered generally poor is in the Copper River basin. As a general rule the quality of ground water decreases with increasing depth throughout the Copper River lowland. Saline springs which occur in the area are the surface manifestation of saline ground water present in the marine sedimentary rocks that underlie much of the glacial-lake deposits. Upward movement of water from these older sedimentary rocks has affected the quality of water in the underlying unconsolidated aquifers. The ground water in the unconsolidated aquifers of the Copper River lowland is characterized by high concentrations of dissolved solids (up to 10,000 mg/L), sodium, chloride, iron, and manganese.

In many of the coastal areas of Alaska, the natural ground-water quality can be affected by salt-water intrusion.

Because the bedrock aquifers in most of Alaska are undeveloped very little is known about their water quality. In general, the concentration of dissolved solids in water from bedrock aquifers is higher than found in the unconsolidated aquifers and the chemical quality is more variable.

The most intensive development of bedrock aquifers is in the uplands near Fairbanks (fractured schist). The chemical quality of the water is highly variable and in many cases the presence of high concentration of several constituents render the water unsuitable or marginal for domestic use. Hardness of ground-water samples from the Fairbanks area ranges from 17 to 1,220 mg/L, and more than 50 percent of sampled wells have a hardness of greater than 200 mg/L (Johnson and others, 1978). Only 7 percent of the sampled wells have a hardness concentration less than 100 mg/L, a level not considered to be objectionable for most uses. Iron concentrations are also generally high in the Fairbanks area, the known maximum being 26,000 µg/L. Arsenic and nitrate concentrations which exceed the recommended limits for domestic use are common in water from bedrock wells in Fairbanks. The primary source of these constituents and the mechanism by which they enter the ground waters have not been conclusively demonstrated, but they are considered to be most likely from natural rather than man-made sources.

Arsenic concentration range from 0 to 10,000 µg/L. In most wells nitrate concentrations are less than 10 mg/L but 21 percent exceeded this value. Mineralized bedrock in the Fairbanks area commonly contains an arsenic-bearing material, arsenopyrite (FeAsS). Scorodite (FeAsOy 2H2O), a mineral formed by the weathering of arsenopyrite, may also be a source of arsenic within the bedrock.

The vast majority of the State's ground-water resources have, for the present, been unafiected by man. However, in the major urban areas and in some outlying villages ground-water quality has been locally degraded, primarily from septic systems, landfills, and abandoned fuel storage tanks.

The majority of known ground-water contamination cases in the State are caused by petroleum products, primarily from leaky fuel tanks.

The largest area of aquifer contamination from fuel tank leakage identified to date is near Peters Creek, a small suburban community northwest of Anchorage. In April 1986, concentrations of benzene that exceeded the State's maximum limits for public drinking-water supplies were found in 15 privately owned wells in a Peters Creek subdivision. High concentrations of Toluene and Xylene also were detected in these wells. The contamination covers an area that encompasses about 40 individual residence lots. Organic compounds indicative of diesel or gasoline fuels have also been detected in ground water in the Nome, Minto, Fairbanks, Anchorage, and Soldotna areas.

Other than bacterial contamination from septic systems and the naturally occurring high concentrations of arsenic and nitrate in the Fairbanks area, the only significant water pollution control problem that has been identified as a health concern in Alaska is leakage from underground fuel storage tanks. Such leakage has locally polluted aquifers in the Nome, Minto, Fairbanks, Anchorage, and Soldotna areas.

SPECIAL NETWORKS AND PROGRAMS

Hydrologic Bench-mark Network is a network of sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a contin-basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

National Stream Quality Accounting Network (NASQAN) is a nationwide data collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in national or regional water-quality planning and management. The 500 or so sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

EXPLANATION OF THE RECORDS

The surface-water and ground-water records published in this report are for the 1986 water year that began October 1, 1985, and ended September 30, 1986. A calendar of the water year is provided on the inside of the front cover. The records contain streamflow data, stage and content data for for lake and reservoirs, water-quality data for surface and ground water, and ground-water-level data. The locations of the stations and wells where the data were collected are shown in figures 3, 4, 5, and 6. The following sections of the introductory text are presented to provide users with a more detailed explanation of how the hydrologic data published in this report were collected, analyzed, computed, and arranged for presentation.

Station Identification Numbers

Each data station, whether streamsite, lake, reservoir, spring, or well, in this report is assigned a unique identification number. This number is unique in that it applies specifically to a given station and to no other. The number usually is assigned when a station is first established and is retained for that station indefinitely. The systems used by the U.S. Geological Survey to assign identification numbers for surface-water stations and for ground-water well sites differ, but both are based on geographic location. The "downstream order" system is used for regular surface-water stations and the "latitude-longitude" system is used for wells, lakes, reservoirs, springs, and for surface-water stations where only miscellaneous measurements and/or water-quality samples are collected.

Downstream Order System

Since October 1, 1950, the order of listing hydrologic-station records in Survey reports is in a downstream direction along the main stream. All stations on a tributary entering upstream from a mainstream station are listed before that station. A station on a tributary that enters between two mainstream stations is listed between them. A similar order is followed in listing stations on first rank, second rank, and other ranks of tributaries. The rank of any tributary with respect to the stream to which it is immediately tributary is indicated by an indentation in the "List of Stations" in the front of this report. Each indention represents one rank. This downstream order and system of indention show which stations are on tributaries between any two stations and the rank of the tributary on which each station is situated. Stations located on islands in Alaska are in downstream order starting at the most westerly point on the island and moving around the island in a counter-clockwise direction (stations on Kodiak Island start at the most northerly point).

The station-identification number is assigned according to downstream order. In assigning station numbers, no distinction is made between regular stations and partial-record stations; therefore, the station number for a partial-record station indicates downstream-order position in a list made up of both types of stations. Water-quality stations located at or near regular stations or partial-record stations have the same number as the regular or partial-record station. Gaps are left in the series of numbers to allow for new stations that may be established; hence, the numbers are not consecutive. The complete eight-digit number for each station, such as 15303600, which appears just to the left of the station name, includes the two-digit Part number "15" plus the six-digit downstream order number "303600." The Part number designates the state of Alaska.

Latitude-Longitude System

The identification numbers for miscellaneous surface-water sites, wells, springs, lakes, and reservoirs are assigned according to the grid system of latitude and longitude. The number consists of 15 digits. The first six digits denote the degrees, minutes, and seconds of latitude, the next seven digits denote degrees, minutes, and seconds of longitide, and the last two digits (assigned sequentially) identify the wells or other sites within a 1-second grid. This site-identification number, once assigned, is a pure number, and has no locational significance. In the rare instance where the initial determination of latitude and longitude are found to be in error, the station will retain its initial identification number; however, its true latitude and longitude will be listed in the LOCATION paragraph of the station description and also stored in the computerized data base files. See figure 2 below.

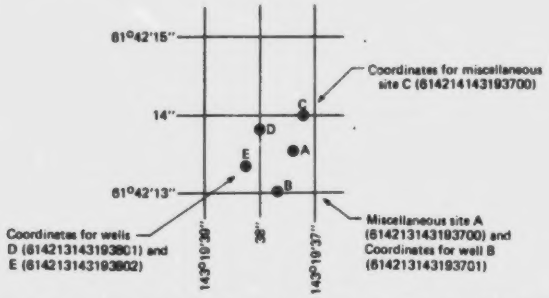
61°42'15"
14"
61°42'13"
143°19'39"
38"
143°19'37"
A
B
C
D
E
Coordinates for miscellaneous site C (614214143193700)
Coordinates for wells D (614213143193801) and E (614213143193802)
Miscellaneous site A (614213143193700) and Coordinates for well B (614213143193701)

Figure 2.–System for numbering wells and miscellaneous sites (latitude and longitude).

Local Number

The local number, which is assigned to well and spring sites, is derived in part from the rectangular subdivision of public lands and is used in Alaska as the site name. The first two letters indicate the principal meridian and the quadrant formed by the intersection of the base line and the principal meridian. The first three digits indicate the township in which the well or spring is located, the next three digits the range, and the last two digits the section. The letters following the section number indicate the quarter section, the quarter-quarter section, and so forth to the fourth order subdivision. Each of these subdivisions is lettered counter-clockwise, from the northeast corner. Each site within the smallest order of subdivision is then given a sequential number. Finally, each well within a section is assigned a sequential map number indicated by the last three digits. Thus, SB00601115BCAD1 001 denotes the Seward meridian (S), the northwest quadrant (B), township 6 north, range 11 west, section 15; and the site is in the SE¼ of NE¼ of the SW¼ of the NW¼ (BCAD)of the section. It was the first site in the 2.5 acre "D" subdivision assigned a sequential number (1). The next three digits, 001, indicate the sequence in which a site was located on a map. Thus, 001 indicates the first site plotted in the one-square-mile section. The next space is left blank. The last five digits, such as 00114, are the Alaska register number (which was used prior to 1981) and is provided for continuity with older reports. Therefore, the local number, for sites established prior to 1981 is SB00601115BCAD1001 00114 and the number for sites established in 1981 is SB00601115BCAD1 001. The local number for springs is the same, except for the last three digits and the Alaska register number (assigned to pre-1981 sites), as indicated by the following examples: SB00601115BCAD1S 4065S (pre-1981) and SB00601115BCAD1S (1981 to present).

Note: Public-land surveys have not been completed for a large portion of Alaska, therefore, some "local numbers" reflect this in an abbreviated form, i.e., SB00601115.

RECORDS OF STAGE AND WATER DISCHARGE

Records of stage and water discharge may be complete or partial. Complete records of discharge are those at which daily mean discharges can be computed or estimated with reasonable accuracy from the supporting data and information. Because the daily mean discharges commonly are published, the the stations are referred to as "daily stations".

By contrast, partial records are obtained through discrete measurements and pertain only to a few flow characteristics, or perhaps only one. The nature of the partial record is indicated by table titles such as "Crest-stage partial records" or "Low-flow partial records". Records of miscellaneous discharge measurements or of from special studies, such as low-flow seepage studies, may be considered as partial records, but they are presented separately in this report. Periodic lake-level measurements are also presented separately. Location of all complete-record, low-flow, and crest-stage partial record stations for which data are given in this report are shown in figures 3, 4, and 5, respectively.

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Data Collection and Computation

The base data collected at gaging stations consist of records of stage and measurements of discharge of streams and stage of lakes. In addition, observations of factors affecting the stage-discharge relation, weather records, and other information are used to supplement base data in determining the daily flow. Records of stage are obtained from direct readings on a nonrecording gage or from a water-stage recorder that gives either a continuous graph of the fluctuations or a tape punched at selected time intervals. Measurements of discharge are made with a current meter, using the general methods adopted by the Geological Survey. These methods are described in standard textbooks, in Water-Supply Paper 2175, and in U.S. Geological Survey Techniques of Water Resources Investigations, Book 3, Chapter A6.

In computing discharge records, results of individual measurements are plotted against the corresponding stages, and stage-discharge relation curves are then constructed. From these curves, rating tables indicating the approximate discharge for any stage within the range of the measurements are prepared. If it is necessary to define extremes of discharge outside the range of the current-meter measurements, the curves are extended using: (1) logarithmic plotting; (2) results of indirect measurements of peak discharge, such as slope-area or flow-through-culvert measurements and computations of flow-over-dams or weirs; (3) step-backwater techniques; or (4) velocity-area studies.

Daily mean discharges are computed by applying the daily mean stages (gage heights) to the stage-discharge curves or tables. If the stage-discharge relation is subject to change because of frequent or continual change in the physical features that form the control, the daily mean discharge is determined by shifting control method, in which correction factors based on the individual discharge measurements and notes of the person who made the measurement are added (or subtracted) to the gage heights before the discharges are determined from the curves or tables. This shifting-control method also is used if the stage-discharge relation is changed temporarily because of debris or aquatic growth on the control.

In computing records of reservoir contents, it is necessary to have curves or tables defining the relation of stage and contents (from prior survey and computations). The application of stage to stage-content curves or tables gives the contents from which daily, monthly, or yearly changes can be determined. Discharges over lake or reservoir spillways are computed from stage-discharge relations much as other stream discharges are computed. Discharge through hydro-power plants can be calculated indirectly by using the theoretical relation of flow-rates with the amount of power being generated by each turbine, the reservoir level, and the estimated efficiency of each turbine. It is necessary to have tables, curves, or formulas relating the above variables (usually supplied by the manufacturer of the turbine). It is also necessary to have records of reservoir elevation, either from periodic observations or continuous records, and power-generation records (usually furnished by the operators of the power plant).

At most stream-gaging stations in Alaska the stage-discharge relation is affected by ice in the winter, and it becomes impossible to compute the discharge in the usual manner. Discharge for periods of ice effect is computed or estimated on the basis of the available gage-height record and occasional winter discharge measurements. Consideration is given to the available information on temperature and precipitation, notes by gage observers and hydrologists, and comparable records of discharge for other stations in the same or nearby basins.

For some gaging stations there are periods when no gage-height record is obtained or the recorded gage height is so faulty that it cannot be used to compute daily discharge. This happens when the recorder is stopped for the winter or otherwise fails to operate properly, intakes are plugged, the float is frozen in the well, or for various other reasons. For such periods the daily discharges are estimated on the basis of recorded range in stage, prior and subsequent records, discharge measurements, weather records, and comparison with records for other stations in the same or nearby basins. Information explaining how estimated daily-discharge values are identified in station records is included in the next two sections, "Data Presentation" ("REMARKS" paragraph) and "Identifying Estimated Daily Discharge".

Data Presentation

The records published for each gaging station consist of two parts, the manuscript or station description and a data table (or tables) for the current water year. Sometimes data for other than the current year are published, usually to present unpublished data. The manuscript provides, under various headings, descriptive information, such as location of station; drainage area; period of record; average discharge; historical and current-year extremes; record accuracy; and other remarks pertinent to station operation and regulation. The following information, as appropriate, is provided with each continuous record of discharge, stage, or reservoir contents. Comments to clarify information presented under the various headings of the station description follow:

LOCATION.--Information on locations is obtained from the most accurate maps available. The location of the gage with respect to cultural and physical features nearby and to the reference place mentioned in the station name is given.

DRAINAGE AREA.--Drainage areas are measured using the most accurate maps available. Because the type of maps available varies from one drainage basin to another or because of difficulties in determining drainage boundaries, the accuracy of drainage-area determinations likewise varies. As appropriate, some drainage-area figures are qualified by "approximately". Drainage areas are updated as better maps become available.

PERIOD OF RECORD.--This indicates the period for which published records are available for the station or for an equivalent station. An equivalent station is one that was in operation at a time the present station was not, and whose location was such that records from it can be considered reasonably equivalent with records from the current station. Some daily stations were operated as partial-record stations prior to conversion to daily-record stations or for other stations monthly discharges only were published. These periods are included in the paragraph.

REVISED RECORDS.--Published records occasionally are found to be incorrect, usually because of new information, and revisions are printed in later reports. Listed under this heading are all the reports in which revisions have been published for the station and the water years to which the revisions apply. If a revision did not include daily, monthly, or annual discharge figures, that fact is noted after the year dates as follows: "(M)" means that only the instantaneoous maximum discharge was revised; "(m)" that only the instantaneous minimum was revised; and "(P)" that only peak discharges were revised. If the drainage area has been revised, the report in which the most recently revised figure was first published is given.

GAGE.--The type of gage in current use, the datum of the current gage referred to National Geodetic Vertical Datum of 1929 (see "Definiton of Terms"), and a condensed history of the types, locations, and datums of previous gages are given under this heading.

REMARKS.--The paragraph begins by identifying by date all periods of estimated daily-discharge record. (See next section, "Identifying Estimated Daily Discharge".) Other information is also presented such as, accuracy of records, special methods of computation, conditions that affect natural flow at the station, and (if appropriate) other pertinent items. Information about reservoir stations is given on the dam forming the reservoir, the capacity, outlet works and spillway, and purpose (use) of the reservoir. For hydro-power sites, the methods used to compute flow through the turbines and over the spillway are mentioned.

COOPERATION.--Records provided by a cooperating organization or obtained for the Geological Survey by a cooperating organization are identified here. Also, if data or information are supplied which aid in the computation of the record, the agency providing the information is named.

AVERAGE DISCHARGE.--The discharge value shown is the arithmetic mean of the water-year mean discharges. It is computed only for stations having at least 5 water years of complete record, and only water years with complete records are used in the computation. If water developements significantly altering flow at a station are put into use after the station has been in operation for a period of years, and sufficient information or data are available, the average is adjusted to give the natural flow at the site. However, if not enough information is available, a new average is computed as soon as 5 water years have accumulated following the developement.

EXTREMES FOR PERIOD OF RECORD.--Extremes may include maximum and minimum discharges, stages, or contents. Unless otherwise qualified, the maximum discharge or contents is the instantaneous maximum corresponding to the highest stage that occurred. The highest stage may have been obtained from a graphic or digital recorder, a crest-stage gage, direct observation of a nonrecording gage, or from high-water marks. If the maximum stage did not occur on the same day as the maximum discharge, it is shown separately. Similarly, the minimum is the instantaneous minimum discharge, unless otherwise qualified.

EXTREMES OUTSIDE PERIOD OF RECORD.--Information about floods or unusually low flows that have occurred outside the stated period of record is included. The information may or may not have been obtained by the U.S. Geological Survey.

EXTREMES FOR CURRENT YEAR.--The contents of this paragraph are similar to those in "PERIOD OF RECORD", except that a peak discharge list with secondary peaks may be given. For records that meet certain criteria, all peak discharges and stages greater than a selected base disharge during the water year are given. The peaks greater than the base discharge, excluding the highest one, are called secondary peaks. The time that the peak occurred is expressed in 24-hour local standard time; for example, 12:30 a. m. is 0030 and 1:30 p. m. is 1330. The minimum for the current water year appears below the table of peak data.

REVISIONS.--If a critical error in published records is discovered, a revision is included in the first report published following discovery of the error.

The daily table for stream-gaging stations gives the mean discharge for each day and also monthly and yearly summaries. In the monthly summary below the daily table, the line headed "TOTAL" gives the sum of the daily figures. The line headed "MEAN" gives the average flow in cubic feet per second during the month. The lines headed "MAX" and "MIN" give the maximum and minimum daily discharges, respectively, for the month. Discharge for the month also may be expressed in cubic feet per second per square mile (line headed "CFSM"), or in inches (line headed "IN"), or in acre-feet (line headed "AC-FT"). Figures for cubic feet per second per square mile and runoff in inches are omitted if there is extensive regulation or diversion, if the contributing drainage area or boundaries are unknown, or if the flow is mostly from a spring. In the yearly summary below the monthly summary, the figures shown are the appropriate daily discharges for the calendar and water years. At some stations monthly and (or) yearly discharges are adjusted for diversions or changes in reservoir contents.

Data collected at partial-record stations follow the information for continuous-record sites. Data for partial-record discharge stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations, and the second is a table of annual maximum stage and discharge at crest-stage stations. The tables of partial-record stations are followed by a listing of discharge measurements made at sites other than continuous-record or partial-record stations. Occasionally, a series of discharge measurements are made within a short time period to investigate the seepage gains or losses along a reach of a stream or to determine the low-flow characteristics of an area. Such measurements are also given in special tables following the listing of miscellaneous measurements. Lake-level data collected at miscellaneous selected lakes are also tabulated.

Identifying Estimated Daily Discharge

Estimated daily-discharge values in the current annual data report are identified by listing the dates of the estimated record in the "REMARKS" paragraph of the station manuscript. Prior to this report for the 1986 water year, estimated daily-discharge values were not specifically identified.

Accuracy of the Records

The accuracy of streamflow data depends primarily on: (1) the stability of the stage-discharge relation or, if the control is unstable, the frequency of discharge measurements; and (2) the accuracy of observations of stage, measurements of discharge, and interpretations of records.

The station description under "REMARKS" states the degree of accuracy of the records. "Excellent" means that about 95 percent of the daily discharges are within 5 percent of the true value; "good" within 10 percent; and "fair" within 15 percent. Records are rated as "poor" when they do not meet the criteria above. Different accuracies may be attributed to different parts of a given record.

Figures of daily mean discharge in this report are shown to the nearest hundredth of a cubic foot per second for discharges of less than 1 ft^3/s; to the nearest tenth between 1.0 and 10 ft^3/s; to whole numbers between 10 and 1,000 ft^3/s; and to 3 significant figures above 1,000 ft^3/s. The number of significant figures used is based solely on the magnitude of the discharge value. The same rounding rules apply to discharges listed for partial-record stations and miscellaneous measurement sites.

Discharge at many stations, as indicated by the monthly mean, may not reflect natural runoff due to the effects of diversion, flow from springs, or to other factors. For such stations, figures of cubic feet per second per square mile and of runoff in inches are not published unless satisfactory adjustments can be made for diversions or for other factors that migh affect the flows. At those stations where adjustments are made, large errors in computed runoff may occur if adjustments are large in comparison to observed discharge. Evaporation from a reservoir is not included in the adjustments for changes in reservoir contents.

Other data available

Information of a more detailed nature than that published for most of the gaging stations such as observations of water temperatures, discharge measurements, gage-height records, and rating tables, is filed in the subdistrict offices at Anchorage, Fairbanks, and Juneau for their areas of responsibility. Also, most of the daily mean discharges are in computer files and can be retreived for statistical analyses. Information on the availability of unpublished data or statistical analyses may be obtained from the district office.

RECORDS OF SURFACE-WATER QUALITY

Records of surface-water quality ordinarily are obtained at or near stream-gaging stations because interpretation of records of surface-water quality nearly always requires corresponding discharge data. Records of surface-water quality in this report involve a variety of types of data and measurement frequencies.

Classification of records

Water-quality data for surface-water sites are grouped into one of three classifications. A continuing-record station is a site where data are collected on a regularly scheduled basis. Frequency may be once or more times daily, weekly, monthly, or quarterly. A partial-record station is a site where water-quality data are collected systematically over a period of years. Frequency of sampling is usually less than quarterly. A miscellaneous sampling site is a location other than a continuing or partial-record station, where random samples are collected to give better areal coverage to define water-quality conditions in the river basin.

A distinction needs to be made between "continuing records" as used in this report and "continuous recordings," which refers to a continuous graph or a series of discrete values punched at short intervals on a paper tape. Some records of water quality, such as temperature and specific conductance, may be obtained by continuous recordings; however, because of costs, most data are obtained only monthly or less frequently.

Arrangement of Records

Water-quality records collected at a surface-water daily record station are published immediately following that record, regardless of the frequency of sample collection. Station number and name are the same for both records. Where a surface-water daily record station is not available or where the water quality differs significantly from that at the nearby surface-water station, the continuing water-quality record is published with its own station number and name in the regular downstream-order sequence. Water-quality data for partial-record stations and for miscellaneous sampling sites appear in separate tables following the table of discharge measurements at miscellaneous sites.

On-Site Measurements and Sample Collection

To assure the data obtained represent the in situ quality of the water, certain measurements, such as water temperature, pH, alkalinity, and dissolved oxygen, are made onsite when the samples are collected. To assure that measurements made in the laboratory also represent the in situ water, prescribed procedures are followed in collecting, treating, and shipping the samples to prevent changes in quality pending analysis in the laboratory. These procedures are given in publications on "Techniques of Water-Resources Investigations, " Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

One sample can adequtely define the water quality at a given time if the mixture of solutes throughout the stream cross section is homogeneous. However, the concentration of solutes at different locations in the cross section may vary widely with different rates of water discharge, depending on the source of material and the turbulence and mixing of the stream. Some streams must be sampled through several vertical sections to obtain a representative sample needed for an accurate mean concentration and for use in calculating load.

Chemical-quality data published in this report are considered to be the most representative values available for the stations listed. The values reported represent water-quality conditions at the time of sampling as much as possible, consistent with available sampling techniques and methods of analysis. In the rare case where an apparent inconsistency exists between a reported pH value and the relative abundance of carbon dioxide species (carbonate and bicarbonate), the inconsistency is the result of a slight uptake of carbon dioxide from the air by the sample between measurement of pH in the field and determination of carbonate and bicarbonate in the laboratory.

Water temperature

Water temperatures are measured at most of the water-quality stations. In addition, water temperatures are taken at time of discharge measurements for water-discharge stations. Large streams have a small diel temperature change; shallow streams may have a daily range of several degrees and may follow closely the changes in air temperature. Some streams may be affected by waste-heat discharges.

At stations where recording instruments are used, maximum and minimum temperatures for each day are published. Water temperatures measured at the time of water-discharge measurements are on file in the District office.

Sediment

Suspended-sediment concentrations are determined from samples collected by using depth-integrating samplers. Samples usually are obtained at several verticals in the cross section, or a single sample may be obtained at a fixed point and a coefficient applied to determine the mean concentration in the cross sections.

During periods of rapidly changing flow or rapidly changing concentration, samples may have been collected more frequently (twice daily or, in some instances, hourly). The published sediment discharges for days of rapidly changing flow or concentration were computed by the subdivided day method (time-discharge weighted average). Therefore, for those days when the published sediment discharge value differs from the value computed as the product of discharge times mean concentration times 0.0027, the reader can assume that the sediment discharge for that day was computed by the subdivided day method. For periods when no samples were collected, daily loads of suspended sediment were estimated on the basis of water discharge, sediment concentrations observed immediately before and after the periods, and suspended-sediment loads for other periods of similar discharge.

At other stations, suspended-sediment samples were collected periodically at many verticals in the stream cross section. Although data collected periodically may represent conditions only at the time of observations, such data are useful in establishing seasonal relations between quality and streamflow in predicting long-term sediment-discharge characteristics of the stream.

In addition to the records of the quantities of suspended sediment, records of the periodic measurements of the particle-size distribution of the suspended sediment and bed material are included.

Laboratory Measurements

Sediment concentration and sand-break samples are analyzed locally all other sediment samples are analyzed in the U. S. Geological Survey laboratory in Iowa City, Iowa. Methods used in analyzing sediment samples and computing sediment records are given in TWRI, Book 5, Chap. C1. Methods used by the Geological Survey laboratory are given in TWRI, Book 1, Chap. D2; Book 3, Chap. C2; Book 5, Chap. A1, A3, and A4.

RECORDS OF GROUND-WATER LEVELS

Only ground-water level data from a basic network of observation wells are published in this report. This basic network consists of observation wells located in the most important aquifers, and therefore the most significant data are obtained from the fewest wells. (See figure 4.)

Data Collection and Computation

Water-level measurements are made in many types of wells, under varying conditions of access and weather conditions. However, the equipment and measuring techniques used at each observation well assure that the measurements are of consistent accuracy and reliability.

Tables of water-level data are presented by Hydrologic Subregion. The station-identification number for a given well is the 15-digit number that appears in the upper left corner of the station description. The secondary identification number is the local number, an alphanumeric number, derived from the township-range location of the well.

Water-level records are obtained from direct measurements with a steel tape or from the graph or punched tape of a water-stage recorder. The water-level measurements in this report are given in feet with reference to either National Geodetic Vertical Datum of 1929 (NGVD of 1929) or land-surface datum (lsd). NGVD of 1929 is the datum plane on which the national network of precise levels is based; land-surface datum is a datum plane that is approximately at land surface at each well. If known, the altitude of the land-surface datum is given in the well description. The height of the measuring point (MP) above or below land-surface datum is also given in each well description. Water levels in wells equipped with recording gages are reported for every fifth day and the end of each month (eom). Daily water levels are reported for a few wells that may have significant fluctuations between every fifth day. The extreme water levels recorded during the year are reported as the highest water level (HIGH) and as the lowest water level (LOW).

Water levels are reported to as many significant figures as can be justified by the local conditions. For example, in a measurement of a depth to water of several hundred feet or if an electric water sensor is used, the error in determining the absolute value of the total depth to water may be a few tenths of a foot. However, the error in determining the net change of water level between successive measurements may be only a hundredth or a few hundredths of a foot. For lesser depths to water, the accuracy is greater. Accordingly, most measurements are reported to a hundredth of a foot, but some are given only to a tenth of a foot.

Data Presentation

Each well record consists of two parts, the station description and the data table of water levels observed during the water year. The description of the well is presented first through use of descriptive headings preceding the tabular data. Clarification of each heading is given below.

LOCATION.--This paragraph follows the well-identification number and reports the latitude and longitude (given in degrees, minutes, and seconds); the Hydrologic Unit; the distance and direction from a geographic point of reference; and the owners name.

AQUIFER.--This entry designates by name (if a name exists) and geologic age the aquifer(s) open to the well.

WELL CHARACTERISTICS.--This entry describes the well in terms of depth, diameter, casing depth and/or screened interval, method of construction, and additional information such as casing breaks, collapsed screen, and other changes since construction.

INSTRUMENTATION.--This paragraph provides information on both the frequency of measurement and the collection method used, allowing the user to better evaluate the reported water-level extremes by knowing whether they are based on weekly, monthly, or some other frequency of measurement.

DATUM.--This entry describes both the measuring point and the land-surface elevation at the well. The measuring point is described physically (such as top of collar, notch in top of casing, plug in pump base and so on), and in relation to land surface (such as 1.3 ft above land-surface datum). The elevation of the land-surface datum is described in feet above (or below) National Geodetic Vertical Datum of 1929 (NGVD of 1929); it is reported with a precision depending on the method of determination.

REMARKS.--This entry describes factors that may influence the water level in a well or the measurement of the water level. It should identify wells that also are water-quality observation wells, and may be used to acknowledge the assistance of local (non-survey) observers.

PERIOD OF RECORD.--This entry indicates the period for which there are published records for the well. It reports the month and year of the start of publication of water-level records by the the U. S. Geological Survey and the words "to current year" if the records are to be continued into the following year. Periods for which water-level records are available, but are not published by the U. S. Geological Survey, may be noted.

EXTREMES FOR PERIOD OF RECORD.--This entry contains the highest and lowest water levels of the period of published record, with respect to land-surface datum, and the dates of their occurrence.

A table of water levels follows the station description for each well. Water levels are reported in feet below land-surface datum and all taped measurements of water levels are listed. For wells equipped with recorders, only abbreviated tables are published; generally, only water-level lows are listed for every fifth day and at the end of the month (eom). The highest and lowest water levels of the water year and their dates of occurrence are shown on a line below the abbreviated table. Because all values are not published for wells with recorders, the extremes may be values that are not listed in the table. Missing records are indicated by dashes in place of the water level.

RECORDS OF GROUND-WATER QUALITY

Records of ground-water quality in this report differ from other types of records in that for most sampling sites they consist of only one set of measurements for the water year. The quality of ground water ordinarily changes slowly; therefore, for most general purposes one annual sampling, or a few samples taken at infrequent intervals during the year, is sufficient. Frequent measurement of the same constituents is not necessary unless one is concerned with a particular problem, such as monitoring for trends in nitrate concentration. In special cases where the quality of ground water may change more rapidly, more frequent measurements are made to identify the nature of the changes.

Data Collection and Computation

The records of ground-water quality in this report were obtained mostly as a part of special studies in specific areas. Consequently, a number of chemical analyses are presented for some areas but none for other areas. As a result, the records for this year, by themselves, do not provide a balanced view of ground-water quality Statewide. Such a view can only be attained by considering records for this year in context with similar records obtained for these and other areas in earlier years.

Data Presentation

The records of ground-water quality are published in a section titled QUALITY OF GROUND WATER immediately following the ground-water-level records. Data for quality of ground water are listed by Hyrologic Subregion, and are identified by well number. The station-identification number for wells sampled is the 15-digit number derived from the latitude-longitude locations. No descriptive statements are given for ground-water-quality records; however, the well number, depth of well, date of sampling, and other pertinent data are given in the table containing the chemical analyses of the ground water.

ACCESS TO WATSTORE DATA

The National WATer Data STOrage and REtrieval System (WATSTORE) was established for handling water data collected through the activities of the U.S. Geological Survey and to provide for more effective and efficient means of releasing the data to the public. The system is operated and maintained on the central computer facilities of the Survey at its National Center in Reston, Virginia.

WATSTORE can provide a variety of useful products ranging from simple data tables to complex statistical analyses. A minimal fee, plus the actual computer cost incurred in producing a desired product, is charged to the requester. Information about the availability of specific types of data, the acquisition of data or products, and user charges can be obtained locally from each of the Water Resources Division's District offices (see address given on the back of the title page).

General inquiries about WATSTORE may be directed to:

Chief Hydrologist
U.S. Geological Survey
437 National Center
Reston, Virginia 22092

DEFINITION OF TERMS

Terms related to streamflow, water-quality, and other hydrologic data, as used in this report, are defined as follows. See also the table for converting English Units to International System of units (SI) on the inside of the back cover.

Acre-foot (AC-FT, acre-ft) is the quantity of water required to cover 1 acre to a depth of 1 foot and is equivalent to 43,560 cubic feet or about 326,000 gallons or 1,233 cubic meters.

Aquifer is a geologic formation, group of formations, or part of a formation that contains sufficient saturated permeable material to yield significant quantities of water to wells and springs.

Artesian means confined and is used to describe a well in which the water level stands above the top of the aquifer, tapped by the well. A flowing artesian well is one in which the water level is above the land surface.

Bacteria are microscopic unicellular organisms without a distinct nucleus, typically spherical, rodlike, or spiral and threadlike in shape often clumped into colonies. Some bacteria cause disease, while others perform an essential role in nature in the recycling of materials; for example, by decomposing organic matter into a form available for reuse by plants.

Total coliform bacteria are a particular group of bacteria that are used as indicators of possible sewage pollution. They are characterized as aerobic or facultative anaerobic, gram-negative, nonspore-forming, rod-shaped bacteria which ferment lactose with gas formation within 48 hours at 35°C. In the laboratory these bacteria are defined as all the organisms which produce colonies with a golden-green metallic sheen within 24 hours when incubated at 35°C ± 1.0°C on M-Endo medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 milliliters (mL) of sample.

Fecal coliform bacteria are bacteria that are present in the intestine or feces of warm-blooded animals. They are often used as indicators of the sanitary quality of water. In the laboratory they are defined as all organisms which produce blue colonies within 24 hours when incubated at 44.5°C ± 0.2°C on M-FC medium (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Fecal streptococcal bacteria are bacteria found also in the intestine of warm-blooded animals. Their presence in water is considered to verify fecal pollution. They are characterized as gram-positive, cocci bacteria which are capable of growth in brain-heart infusion broth. In the laboratory they are defined as all the organisms which produce red or pink colonies within 48 hours at 35°C ± 1.0°C on KF-streptococcus agar (nutrient medium for bacterial growth). Their concentrations are expressed as number of colonies per 100 mL of sample.

Bed material is the unconsolidated material of which a streambed, lake, pond, reservoir, or estuary bottom is composed.

Bottom material: See Bed material.

Cells /volume refers to the number of cells of any organism which is counted by using a microscope and grid or counting cell. Many planktonic organisms are multicelled and are counted according to the number of contained cells per sample, usually milliliters (mL) or liters (L).

Chlorophyll refers to the green pigments of plants. Chlorophyll a and b are the two most common green pigments in plants.

Color unit is produced by one milligram per liter of platinum in the form of the chloroplatinate ion. Color is expressed in units of the platinum-cobalt scale.

Contents is the volume of water in a reservoir or lake. Unless otherwise indicated, volume is computed on the basis of a level pool and does not include bank storage.

Control designates a feature downstream from the gage that determines the stage-discharge relation at the gage. This feature may be a natural constriction of the channel, an artificial structure, or a uniform cross section over a long reach of the channel.

Cubic feet per second per square mile [$(ft^3/s)/mi^2$ or CFSM] is the average number of cubic feet of water flowing per second from each square mile of area drained, assuming that the runoff is distributed uniformly in time and area.

Cubic foot per second (FT^3/S, or ft^3/s) is the rate of discharge representing a volume of 1 cubic foot passing a given point during 1 second and is equivalent to approximately 7.48 gallons per second or 448.8 gallons per minute or 0.02832 cubic meters per second.

Cubic foot per second-day $(ft^3)/d$ is the volume of water represented by a flow of 1 cubic foot per second for 24 hours. It is equivalent to 86,400 cubic feet, approximately 1.9835 acre-feet, about 646,000 gallons, or 2,445 cubic meters.

Discharge is the volume of water (or more broadly, volume of fluid plus suspended sediment) that passes a given point within a given period of time.

Mean discharge (MEAN) is the arithmetic mean of individual daily mean discharges during a specific period.

Instantaneous discharge is the discharge at a particular instant of time.

Dissolved refers to that material in a representative water sample which passes through a 0.45 micrometer membrane filter. This is a convenient operational definition used by Federal agencies that collect water data. Determinations of "dissolved" constituents are made on subsamples of the filtrate.

Dissolved-solids concentration of water is determined either analytically by the "residue-on-evaporation" method, or mathematically by totaling the concentrations of individual constituents reported in a comprehensive chemical analysis. During the analytical determination of dissolved solids, the bicarbonate (generally a major dissolved component of water) is converted to carbonate. Therefore, in the mathematical calculation of dissolved-solids concentration, the bicarbonate value, in milligrams per liter, is multiplied by 0.492 to reflect the change.

Drainage area of a stream at a specific location is that area, measured in a horizontal plane, enclosed by a topographic divide from which direct surface runoff from precipitation normally drains by gravity into the stream above the specified point. Figures of drainage area given herein include all closed basins, or noncontributing areas, within the area unless otherwise noted.

Drainage basin is a part of the surface of the earth that is occupied by a drainage system, which consists of a surface stream or a body of impounded surface water together with all tributary surface streams and bodies of impounded surface water.

Gage height (G.H.) is the water-surface elevation referred to some arbitrary gage datum. Gage height is often used interchangeably with the general term "stage," although gage height is more appropriate when used with a reading on a gage.

Gaging station is a particular site on a stream, canal, reservoir, or lake where systematic observations of hydrologic data are obtained.

Hardness of water is a physical-chemical characteristic that is commonly recognized by the increased quantity of soap required to produce lather. It is attributable to the presence of alkaline earths (principally calcium and magnesium) and is expressed as equivalent calcium carbonate ($CaCO3$).

Hydrologic Bench-Mark Network is a network of sites in small drainage basins around the country whose purpose is to provide consistent data on the hydrology, including water quality, and related factors in representative undeveloped watersheds nationwide, and to provide analyses on a continuing basis to compare and contrast conditions observed in basins more obviously affected by the activities of man.

Hydrologic unit is a geographic area representing part or all of a surface drainage basin or distinct hydrologic feature as delineated by the Office of Water Data Coordination on the State Hydrologic Unit Maps; each hydrologic unit is identified by an eight-digit number.

Land-surface datum (lsd) is a datum plane that is approximately at land surface at each ground-water observation well.

Measuring point (MP) is an arbitrary permanent reference point from which the distance to the water surface in a well is measured to obtain the water level.

Micrograms per liter (UG/L, µg/L) is a unit expressing the concentration of chemical constituents in solution as mass (micrograms) of solute per unit volume (liter) of water. One thousand micrograms per liter is equivalent to one milligram per liter.

Milligrams per liter (MG/L, mg/L) is a unit for expressing the concentration of chemical constituents in solution. Milligrams per liter represents the mass of solute per unit volume (liter) of water. Concentration of suspended sediment also is expressed in mg/L, and is based on the mass of sediment per liter of water-sediment mixture.

National Geodetic Vertical Datum of 1929 (NGVD) is a geodetic datum derived from a general adjustment of the first order level nets of both the United States and Canada. It was formerly called "Sea Level Datum of 1929" or "mean sea level" in this series of reports. Although the datum was derived from the average sea level over a period of many years at 26 tide stations along the Atlantic, Gulf of Mexico, and Pacific Coasts, it does not necessarily represent local mean sea level at any particular place.

National Stream Quality Accounting Network (NASQAN) is a nationwide data-collection network designed by the U.S. Geological Survey to meet many of the information needs of government agencies and other groups involved in national or regional water-quality planning and management. The sites in NASQAN are generally located at the downstream ends of hydrologic accounting units designated by the U.S. Geological Survey Office of Water Data Coordination in consultation with the Water Resources Council. The objectives of NASQAN are (1) to obtain information on the quality and quantity of water moving within and from the United States through a systematic and uniform process of data collection, summarization, analysis, and reporting such that the data may be used for, (2) description of the areal variability of water quality in the Nation's rivers through analysis of data from this and other programs, (3) detection of changes or trends with time in the pattern of occurrence of water-quality characteristics, and (4) providing a nationally consistent data base useful for water-quality assessment and hydrologic research.

Organism is any living entity.

Parameter Code is a five-digit number used in the U.S. Geological Survey computerized data system, WATSTORE, to uniquely identify a specific constituent. The codes used in WATSTORE are the same as those used in the U.S. Environmental Protection Agency data system, STORET. The Environmental Protection Agency assigns and approves all requests for new codes.

Partial-record station is a particular site where limited streamflow and/or water-quality data are collected systematically over a period of years for use in hydrologic analyses.

Particle size is the diameter, in millimeters (mm), of suspended sediment or bed material determined by either sieve or sedimentation methods. Sedimentation methods (pipet, bottom-withdrawal tube, visual-accumulation tube) determine fall diameter of particles in either distilled water (chemically dispersed) or in native water (the river water at the time and point of sampling).

Particle-size classification used in this report agrees with recommendations made by the American Geophysical Union Subcommittee on Sediment Terminology. The classification is as follows:

Classification	Size (mm)	Method of analysis
Clay..........	0.00024 - 0.004	Sedimentation.
Silt..........	.004 - .062	Sedimentation.
Sand..........	.062 - 2.0	Sedimentation or sieve.
Gravel........	2.0 - 64.0	Sieve.

The particle-size distributions given in this report are not necessarily representative of all particles in transport in the stream. Most of the organic material is removed and the sample is subjected to mechanical and chemical dispersion before analysis in distilled water. Chemical dispersion is not used for native-water analysis.

Picocurie (PC, pCi) is one trillionth (1 x 1012) of the amount of radioactivity represented by a curie (Ci). A curie is the amount of radioactivity that yields 3.7 x 1010 radioactive disintegrations per second. A picocurie yields 2.22 dpm (disintegrations per minute).

Polychlorinated biphenyls (PCBs) are industrial chemicals that are mixtures of chlorinated biphenyl compounds having various percentages of chlorine. They are similar in structure to organochlorine insecticides.

Radiochemical program is a network of regularly sampled water-quality stations where samples are collected to be analyzed for radioisotopes. The streams that are sampled represent major drainage basins in the United States.

Recoverable from bottom material is the amount of a given constituent that is in solution after a representative sample of bottom material has been digested by a method (usually using an acid or mixture of acids) that results in dissolution of readily soluble substances. Complete dissolution of all bottom material is not achieved by the digestion treatment and thus the determination represents less than the total amount (that is, less than 95 percent) of the constituent in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Return period is the average time interval between occurrences of a hydrologic event of a given or greater magnitude, usually expressed in years. May also be called recurrence interval.

Runoff in inches (IN, in) shows the depth to which the drainage area would be covered if all the runoff for a given time period were uniformly distributed on it.

Sediment is solid material that originates mostly from disintegrated rocks and is transported by, suspended in, or deposited from water; it includes chemical and biochemical precipitates and decomposed organic material such as humus. The quantity, characteristics, and cause of the occurrence of sediment in streams are influenced by environmental factors. Some major factors are degree of slope, length of slope, soil characteristics, land usage, and quantity and intensity of precipitation.

Bed load is the sediment that is transported in a stream by rolling, sliding, or skipping along the bed and very close to it. In this report, bed load is considered to consist of particles in transit within 0.25 ft of the streambed.

Bed load discharge (tons per day) is the quantity of bed load measured by dry weight that moves past a section as bed load in a given time.

Suspended-sediment is the sediment that at any given time is maintained in suspension by the upward components of turbulent currents or that exists in suspension as a colloid.

Suspended-sediment concentration is the velocity-weighted concentration of suspended sediment in the sampled zone (from the water surface to a point approximately 0.3 ft above the bed) expressed as milligrams of dry sediment per liter of water-sediment mixture (mg/L).

Mean concentration is the time-weighted concentration of suspended sediment passing a stream section during a 24-hour day.

Suspended-sediment discharge (tons/day) is the rate at which dry mass of sediment passes a section of a stream or is the quantity of sediment, as measured by dry mass or volume, that passes a section in a given time. It is calculated in units of tons per day as follows: sediment concentration (mg/L) x water discharge (ft^3/s) x 0.0027.

Suspended-sediment load is a general term that refers to material in suspension. It is not synonymous with either discharge or concentration.

Total sediment discharge (tons/day) is the sum of the suspended-sediment discharge and the bedload discharge. It is the total quantity of sediment, as measured by dry mass or volume, that passes a section during a given time.

Solute is any substance derived from the atmosphere, vegetation, soil, or rocks that is dissolved in water.

Specific conductance is a measure of the ability of a water to conduct an electrical current. It is expressed in microsiemens per centimeter at 25°C. Specific conductance is related to the type and concentration of ions in solution and can be used for approximating the dissolved-solids content of the water. Commonly, the concentration of dissolved solids (in milligrams per liter) is about 65 percent of the specific conductance (in microsiemens). This relation is not constant from stream to stream, and it may vary in the same source with changes in the composition of the water.

Stable Isotope ratios (per MILL/MIL) a unit expressing the ratio of the abundance of two radioactive isotopes. Isotope ratios are used in hydrologic studies to determine the age or source of specific waters, to evaluate mixing of different waters, as an aid in determining reaction rates, and other chemical or hydrologic processes.

Stage-discharge relation is the relation between gage height (stage) and volume of water per unit of time, flowing in a channel.

Streamflow is the discharge that occurs in a natural channel. Although the term "discharge" can be applied to the flow of a canal, the word "streamflow" uniquely describes the discharge in a surface stream course. The term "streamflow" is more general than "runoff" as streamflow may be applied to discharge whether or not it is affected by diversion or regulation.

Suspended (as used in tables of chemical analyses) refers to the amount (concentration) of undissolved material in a water-sediment mixture. It is associated with the material retained on a 0.45-micrometer filter.

Suspended, recoverable is the amount of a given constituent that is in solution after the part of a representative water-suspended sediment sample that is retained on a 0.45 micrometer membrane filter has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all the particulate matter is not achieved by the digestion treatment and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Determinations of "suspended, recoverable" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total recoverable concentrations of the constituent.

Suspended, total is the total amount of a given constituent in the part of a representative water-suspended sediment sample that is retained on a 0.45 micrometer membrane filter. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent determined. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to determine when the results should be reported as "suspended, total".

Determinations of "suspended, total" constituents are made either by analyzing portions of the material collected on the filter or, more commonly, by difference, based on determinations of (1) dissolved and (2) total concentrations of the constituent.

Thermograph is an instrument that continuously records variations of temperature on a chart. The more general term "temperature recorder" is used in the table headings and refers to any instrument that records temperature whether on a chart, a tape, or any other medium.

Tons per acre-foot indicates the dry mass of dissolved solids in 1 acre-foot of water. It is computed by multiplying the concentration of the constituent, in milligrams per liter, by 0.00136.

Tons per day (T/DAY) is the quantity of a substance in solution or suspension that passes a stream section during a 24-hour day.

Total is the total amount of a given constituent in a representative water-suspended sediment sample, regardless of the constituent's physical or chemical form. This term is used only when the analytical procedure assures measurement of at least 95 percent of the constituent present in both the dissolved and suspended phases of the sample. A knowledge of the expected form of the constituent in the sample, as well as the analytical methodology used, is required to judge when the results should be reported as "total". (Note that the word "total" does double duty here, indicating both that the sample consists of a water-suspended sediment mixture and that the analytical method determines all of the constituent in the sample.)

Total discharge is the total quantity of any individual constituent, as measured by dry mass or volume, that passes through a stream cross-section per unit of time. This term needs to be qualified, such as "total sediment discharge," "total chloride discharge," and so on.

Total, recoverable is the amount of a given constituent that is in solution after a representative water-suspended sediment sample has been digested by a method (usually using a dilute acid solution) that results in dissolution of only readily soluble substances. Complete dissolution of all particulate matter is not achieved by the digestion treatment, and thus the determination represents something less than the "total" amount (that is, less than 95 percent) of the constituent present in the dissolved and suspended phases of the sample. To achieve comparability of analytical data, equivalent digestion procedures would be required of all laboratories performing such analyses because different digestion procedures are likely to produce different analytical results.

Tritium Network is a network of stations which has been established to provide baseline information on the occurrence of tritium in the Nation's surface waters. In addition to the surface-water stations in the network, tritium data are also obtained at a number of precipitation stations. The purpose of the precipitation stations is to provide an estimate sufficient for hydrologic studies of the tritium input to the United States.

Water year in Geological Survey reports dealing with water supply is the 12-month period, October 1 through September 30. The water year is designated by the calender year in which it ends and which includes 9 of the 12 months. Thus, the year ending September 30, 1986, is called the "1986 water year."

WDR is used as an abbreviation for "Water-Data Report" in the REVISED RECORDS paragraph to refer to State annual hydrologic-data reports (WRD was used as an abbreviation for "Water-Resources Data" in reports published prior to 1976).

WSP is used as an abbreviation for "Water-Supply Paper" in references to previously published reports.

Thirty-four manuals by the U.S. Geological Survey have been published to date in the series on techniques describing procedures for planning and executing specialized work in water-resources investigations. The material is grouped under major subject headings called books and in further divided into sections and chapters. For example, Section A of Book 3 (Applications of Hydraulics) is on surface water. The chapter, the unit of publication, is limited to a narrow field of subject matter. This format permits flexibility in revision and publication as the need arises. The reports listed below are for sale by the U.S. Geological Survey, Branch of Distribution, 604 South Pickett Street, Alexandria, VA 22304 (authorized agent of the Superintendent of Documents, Government Printing Office).

NOTE: When ordering any of these publications, please give the title, book number, chapter number, and "U.S. Geological Survey Techniques of Water-Resources Investigations."

1-D1. *Water temperature--influential factors, field measurement, and data presentation*, by H. H. Stevens, Jr., J. F. Ficke, and G. F. Smoot: USGS--TWRI Book 1, Chapter D1. 1975. 65 pages.

1-D2. *Guidelines for collection and field analysis of ground-water samples for selected unstable constituents*, by W. W. Wood: USGS--TWRI Book 1, Chapter D2. 1976. 24 pages.

2-D1. *Application of surface geophysics to ground-water investigations*, by A. A. R. Zohdy, G. P. Eaton, and D. R. Mabey: USGS--TWRI Book 2, Chapter D1. 1974. 116 pages.

2-E1. *Application of borehole geophysics to water-resources investigations*, by W. S. Keys and L. M. MacCary: USGS--TWRI Book 2, Chapter E1. 1971. 126 pages.

3-A1. *General field and office procedures for indirect discharge measurements*, by M. A. Benson and Tate Dalrymple: USGS--TWRI Book 3, Chapter A1. 1967. 30 pages.

3-A2. *Measurement of peak discharge by the slope-area method*, by Tate Dalrymple and M. A. Benson: USGS--TWRI Book 3, Chapter A2. 1967. 12 pages.

3-A3. *Measurement of peak discharge at culverts by indirect methods*, by G. L. Bodhaine: USGS--TWRI Book 3, Chapter A3. 1968. 60 pages.

3-A4. *Measurement of peak discharge at width contractions by indirect methods*, by H. F. Matthai: USGS--TWRI Book 3, Chapter A4. 1967. 44 Pages.

3-A5. *Measurement of peak discharge at dams by indirect methods*, by Harry Hulsing: USGS--TWRI Book 3, Chapter A5. 1967. 29 pages.

3-A6. *General procedure for gaging streams*, by R. W. Carter and Jacob Davidian: USGS--TWRI Book 3, Chapter A6. 1968. 13 pages.

3-A7. *Stage measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A7. 1968. 28 pages.

3-A8. *Discharge measurements at gaging stations*, by T. J. Buchanan and W. P. Somers: USGS--TWRI Book 3, Chapter A8. 1969. 65 pages.

3-A9. *Measurement of time of travel and dispersion in streams by dye tracing*, by E. F. Hubbard, F. A. Kilpatrick, L. A. Martens, and J. F. Wilson, Jr.: USGS--TWRI Book 3, Chapter A9. 1982. 44 pages.

3-A10. *Discharge ratings at gaging stations*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A10. 1984. 59 pages.

3-A11. *Measurement of discharge by moving-boat method*, by G. F. Smoot and C. E. Novak: USGS--TWRI Book 3, Chapter A11. 1969. 22 pages.

3-A13. *Computation of continuous records of streamflow*, by E. J. Kennedy: USGS--TWRI Book 3, Chapter A13. 1983. 53 pages.

3-A14. *Use of flumes in measuring discharge*, by F. A. Kilpatrick and V. R. Schneider: USGS--TWRI Book 3, Chapter A14. 1983. 46 pages.

3-A15. *Computation of water-surface profiles in open channels*, by Jacob Davidian: USGS--TWRI Book 3, Chapter A15. 1984. 48 pages.

3-B1. *Aquifer-test design, observation, and data analysis*, by R. W. Stallman: USGS--TWRI Book 3, Chapter B1. 1971. 26 pages.

3-B2. *Introduction to ground-water hydraulics, a programed text for self-instruction*, by G. D. Bennett: USGS--TWRI Book 3, Chapter B2. 1976. 172 pages.

3-B3. *Type curves for selected problems of flow to wells in confined aquifers*, by J. E. Reed: USGS-TWRI Book 3, Chapter B3. 1980. 106 pages.

3-C1. *Fluvial sediment concepts* by H. P. Guy: USGS--TWRI Book 3, Chapter C1. 1970. 55 pages.

3-C2. *Field methods for measurement of fluvial sediment* by H. P. Guy and V. W. Norman: USGS--TWRI Book 3, Chapter C2. 1970. 59 pages.

3-C3. *Computation of fluvial-sediment discharge* by George Porterfield: USGS--TWRI Book 3, Chapter C3. 1972. 66 pages.

4-A1. *Some statistical tools in hydrology,* by H. C. Riggs: USGS--TWRI Book 4, Chapter A1. 1968. 39 pages.

4-A2. *Frequency curves* by H. C. Riggs: USGS--TWRI Book 4, Chapter A2. 1968. 15 pages.

4-B1. *Low-flow investigations* by H. C. Riggs: USGS--TWRI Book 4, Chapter B1. 1972. 18 pages.

4-B2. *Storage analyses for water supply.* by H. C. Riggs and C. H. Hardison: USGS--TWRI Book 4, Chapter B2. 1973. 20 pages.

4-B3. *Regional analyses of streamflow characteristics.* by H. C. Riggs: USGS--TWRI Book 4, Chapter B3. 1973. 15 pages.

4-D1. *Computation of rate and volume of stream depletion by wells* by C. T. Jenkins: USGS--TWRI Book 4, Chapter D1. 1970. 17 pages.

5-A1. *Methods for determination of inorganic substances in water and fluvial sediments* by M. W. Skougstad and others, editors: USGS--TWRI Book 5, Chapter A1. 1979. 626 pages.

5-A2. *Determination of minor elements in water by emission spectroscopy* by P. R. Barnett and E. C. Mallory, Jr.: USGS--TWRI Book 5, Chapter A2. 1971. 31 pages.

5-A3. *Methods for analysis of organic substances in water.* by D. F. Goerlitz and Eugene Brown: USGS--TWRI Book 5, Chapter A3. 1972. 40 pages.

5-A4. *Methods for collection and analysis of aquatic biological and microbiological samples* edited by P. E. Greeson, T. A. Ehlke, G. A. Irwin, B. W. Lium, and K. V. Slack: USGS--TWRI Book 5, Chapter A4. 1977. 332 pages.

5-A5. *Methods for determination of radioactive substances in water and fluvial sediments.* by L. L. Thatcher, V. J. Janzer, and K. W. Edwards: USGS--TWRI Book 5, Chapter A5. 1977. 95 pages.

5-A6. *Quality assurance practices for the chemical and biological analyses of water and fluvial sedments,* by L. C. Friedman and D. E. Erdmann: USGS--TWRI Book 5, Chapter A6. 1982. 181 pages.

5-C1. *Laboratory theory and methods for sediment analysis* by H. P. Guy: USGS--TWRI Book 5, Chapter C1. 1969. 58 pages.

7-C1. *Finite difference model for aquifer simulation in two dimensions with results of numerical experiments,* by P. C. Trescott, G. F. Pinder, and S. P. Larson: USGS--TWRI Book 7, Chapter C1. 1976. 116 pages.

7-C2. *Computer model of two-dimensional solute transport and dispersion in ground water.* by L. F. Konikow and J. D. Bredehoeft: USGS--TWRI Book 7, Chapter C2. 1978. 90 pages.

7-C3. *A model for simulation of flow in singular and interconnected channels* by R. W. Schaffranek, R. A. Baltzer, and D. E. Goldberg: USGS--TWRI Book 7, Chapter C3. 1981. 110 pages.

8-A1. *Methods of measuring water levels in deep wells* by M. S. Garber and F. C. Koopman: USGS--TWRI Book 8, Chapter A1. 1968. 23 pages

8-A2. *Installation and service manual for U.S. Geological Survey manometers* by J. D. Craig: USGS--TWRI Book 8, Chapter A2. 1983. 57 pages.

8-B2. *Calibration and maintenance of vertical-axis type current meters* by G. F. Smoot and C. E. Novak: USGS--TWRI Book 8, Chapter B2. 1968. 15 pages.

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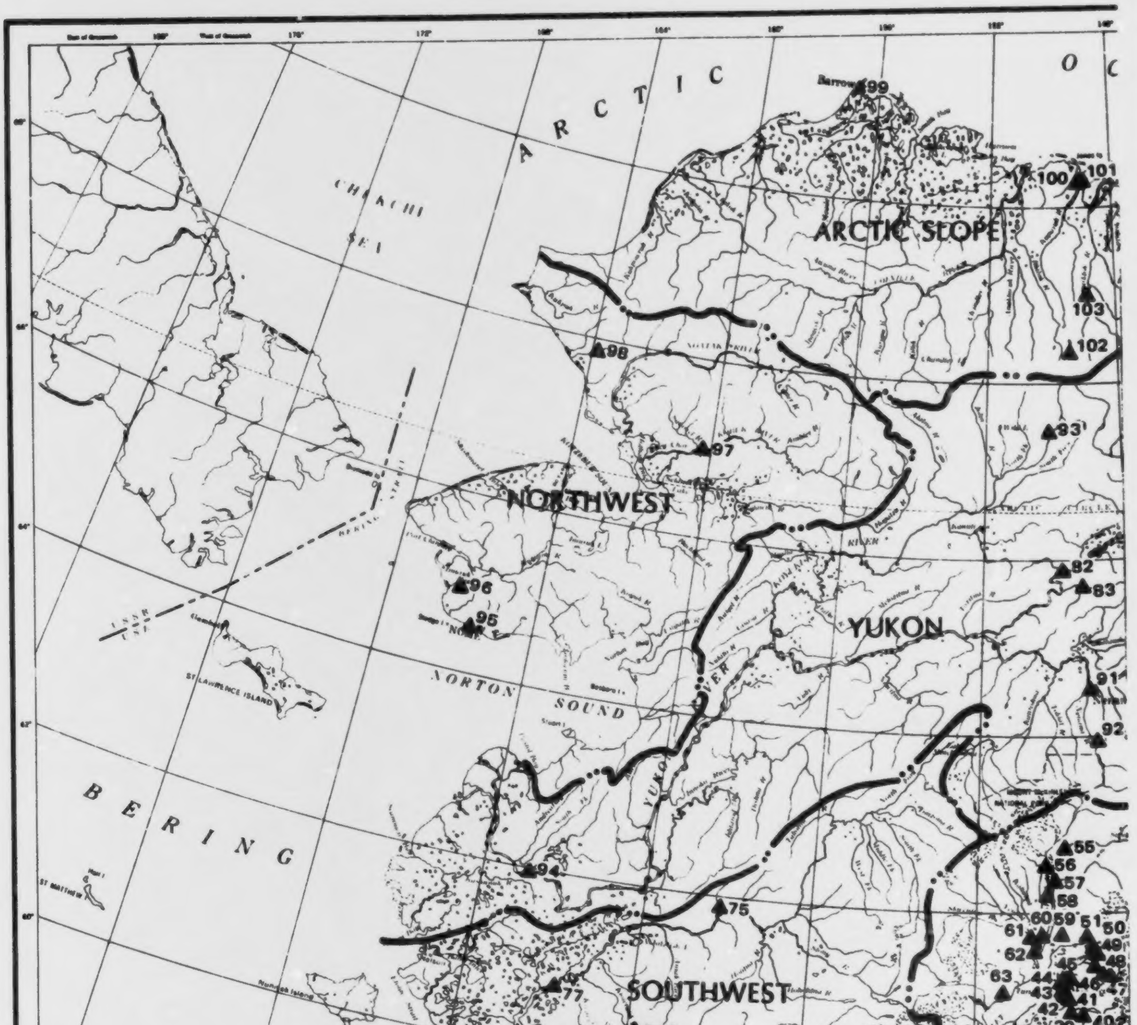

Base from U.S. Geological Survey Alaska Map A

Figure 3. – Locations of gaging stations.

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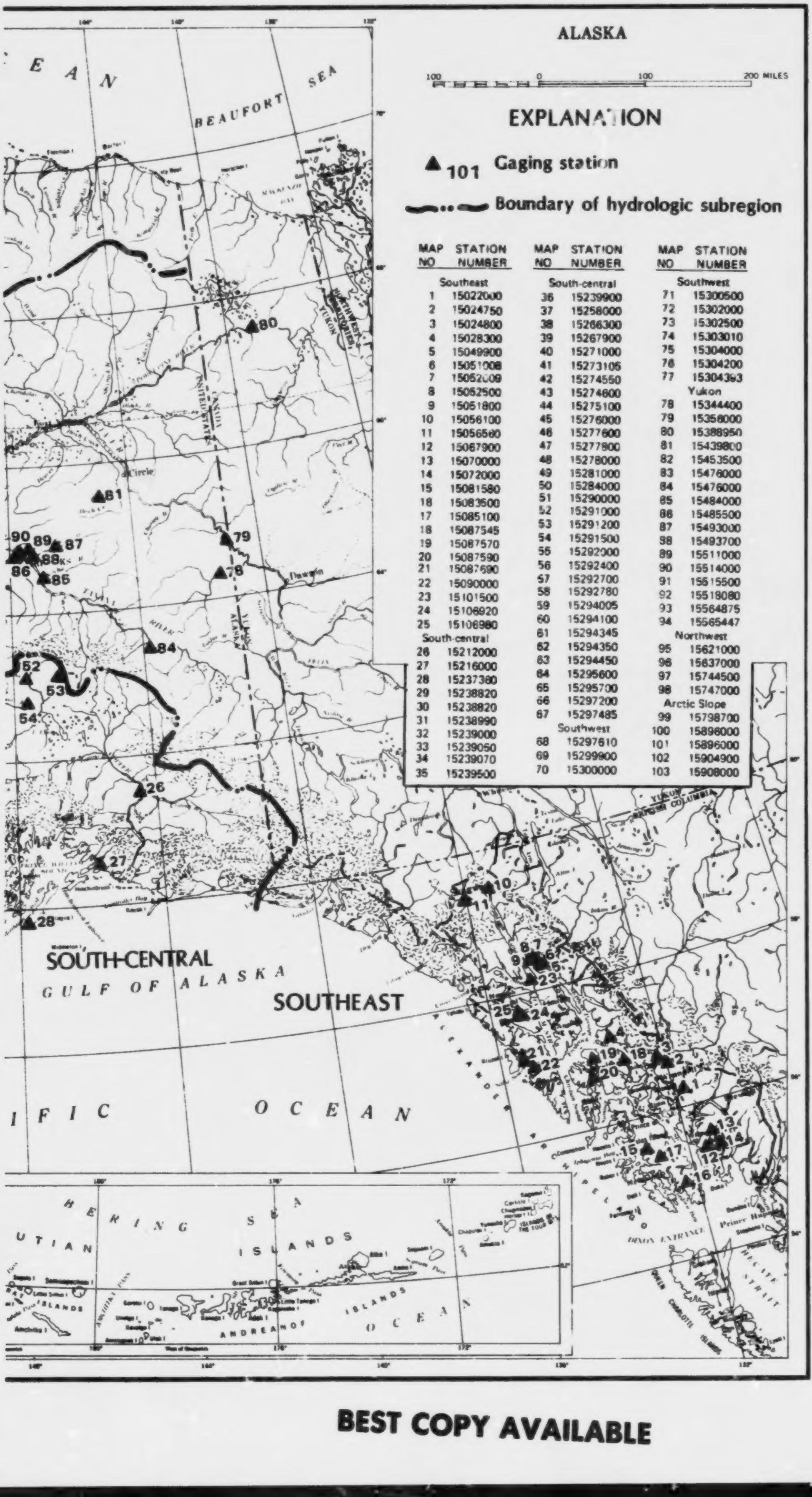

ALASKA

EXPLANATION

▲101 Gaging station

—··— Boundary of hydrologic subregion

MAP NO	STATION NUMBER
Southeast	
1	15022000
2	15024750
3	15024800
4	15028300
5	15049900
6	15051008
7	15052009
8	15052500
9	15051800
10	15056100
11	15056560
12	15067900
13	15070000
14	15072000
15	15081580
16	15083500
17	15085100
18	15087545
19	15087570
20	15087590
21	15087690
22	15090000
23	15101500
24	15106920
25	15106980
South-central	
26	15212000
27	15216000
28	15237380
29	15238820
30	15238820
31	15238990
32	15239000
33	15239050
34	15239070
35	15239500
South-central	
36	15239900
37	15258000
38	15266300
39	15267900
40	15271000
41	15273105
42	15274550
43	15274600
44	15275100
45	15276000
46	15277600
47	15277800
48	15278000
49	15281000
50	15284000
51	15290000
52	15291000
53	15291200
54	15291500
55	15292000
56	15292400
57	15292700
58	15292780
59	15294005
60	15294100
61	15294345
62	15294350
63	15294450
64	15295600
65	15295700
66	15297200
67	15297485
Southwest	
68	15297610
69	15299900
70	15300000
Southwest	
71	15300500
72	15302000
73	15302500
74	15303010
75	15304000
76	15304200
77	15304363
Yukon	
78	15344400
79	15356000
80	15388950
81	15439800
82	15453500
83	15476000
84	15476000
85	15484000
86	15485500
87	15493000
88	15493700
89	15511000
90	15514000
91	15515500
92	15518080
93	15564875
94	15565447
Northwest	
95	15621000
96	15637000
97	15744500
98	15747000
Arctic Slope	
99	15798700
100	15896000
101	15896000
102	15904900
103	15908000

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15022000 HARDING RIVER NEAR WRANGELL

LOCATION.--Lat 56°12'48", long 131°38'12", in SW¼SW¼ sec.22, T.65 S., R.89 E., Hydrologic Unit 19060000, in Tongass National Forest, on right bank 1 mi upstream from mouth on north shore of Bradfield Canal, 4 mi downstream from Fall Lake, and 34 mi southeast of Wrangell.

DRAINAGE AREA.--67.4 mi^2.

PERIOD OF RECORD.--August 1951 to current year.

REVISED RECORDS.--WSP 1640: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft, by barometer. Prior to Sept. 30, 1960, at site 300 ft upstream at datum 0.12 ft lower. Oct. 1, 1960, to Aug. 23, 1975, at prior site and present datum.

REMARKS.--Estimated daily discharges: Nov. 9-12, Nov. 17 to Dec. 19 and Feb. 11-25. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--35 years, 728 ft^3/s, 146.68 in/yr, 527,400 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,000 ft^3/s, Oct. 14, 1961, gage height, 16.22 ft, site then in use, from rating curve extended above 5,000 ft^3/s on basis of slope-area measurement at gage height, 13.90 ft; minimum daily, 35 ft^3/s, Jan. 23 to Feb. 5, 1969.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 19	0400	(a)	*10.33	Sept.23	0645	*4,140	9.44

(a) backwater from ice.

Minimum daily discharge, 64 ft^3/s, Dec. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	994	223	66	177	285	862	231	301	1110	1660	1430	1280
2	1790	177	65	151	517	661	208	379	913	1520	2040	1070
3	1070	162	64	132	358	677	213	486	830	1170	2130	696
4	1360	151	74	121	244	1080	233	541	987	1060	1770	558
5	1150	135	96	118	196	841	304	585	1370	1210	1550	531
6	671	128	130	113	165	508	410	614	1620	1410	2120	544
7	488	131	98	181	142	511	446	683	1760	1350	1550	501
8	398	117	85	197	128	743	611	722	1660	1210	1160	455
9	651	112	74	343	119	682	359	618	1600	1380	972	564
10	1010	108	71	432	109	438	257	481	1480	1520	1020	942
11	725	105	68	271	100	339	209	437	1160	1520	1420	684
12	777	105	66	425	96	345	174	464	946	1310	1540	497
13	1670	108	66	743	92	318	155	394	1010	1390	1970	416
14	1600	324	71	856	88	292	142	333	1540	1330	1270	358
15	796	194	78	528	86	264	136	328	1820	1340	810	319
16	589	131	110	327	84	238	153	379	1360	1360	638	298
17	795	108	250	246	82	224	209	723	1300	1410	916	273
18	800	99	1100	208	80	288	252	627	1200	1360	789	250
19	640	91	1700	215	78	461	415	811	1310	1490	630	230
20	467	86	1610	184	77	702	769	789	1290	1560	545	221
21	381	83	1110	159	76	942	531	643	1390	1510	504	223
22	360	80	1460	166	75	610	421	565	1950	1240	493	2240
23	402	77	943	173	74	483	351	517	2410	1170	1130	3170
24	373	75	643	194	150	404	293	666	1730	1240	1550	1230
25	299	73	536	731	750	348	251	1380	1190	1370	1060	1050
26	259	71	421	748	812	363	262	1640	978	1100	831	739
27	232	70	322	547	1030	500	299	1610	1240	1530	831	528
28	207	69	268	343	1750	564	286	1190	1460	1180	808	462
29	289	68	237	235	---	467	272	1220	1460	900	931	559
30	330	67	203	183	---	375	276	1560	1360	781	719	459
31	283	---	195	164	---	273	---	1200	---	838	620	---
TOTAL	21856	3528	12280	9611	7843	15803	9128	22886	41434	40419	35747	21347
MEAN	705	118	396	310	280	510	304	738	1381	1304	1153	712
MAX	1790	324	1700	856	1750	1080	769	1640	2410	1660	2130	3170
MIN	207	67	64	113	74	224	136	301	830	781	493	221
CFSM	10.5	1.75	5.88	4.60	4.15	7.57	4.51	11.0	20.5	19.3	17.1	10.6
IN.	12.06	1.95	6.78	5.30	4.33	8.72	5.04	12.63	22.87	22.31	19.73	11.78
AC-FT	43350	7000	24360	19060	15560	31350	18110	45390	82180	80170	70900	42340

CAL YR 1985	TOTAL	263723	MEAN	723	MAX	2530	MIN	64	CFSM	10.7	IN	145.55	AC-FT	523100
WTR YR 1986	TOTAL	241882	MEAN	663	MAX	3170	MIN	64	CFSM	9.84	IN	133.50	AC-FT	479800

15024750 GOAT CREEK NEAR WRANGELL

LOCATION.--Lat 56°39'40", long 131°58'14", in NE¼NE¼ sec.23, T.60 S., R.85 E., Hydrologic Unit 19060000, in Tongass National Forest, on left bank 0.4 mi upstream from mouth and 20 mi northeast of Wrangell.

DRAINAGE AREA.--17.3 mi^2.

PERIOD OF RECORD.--August 1976 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 35 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1-11, Nov. 8 to Jan. 13, Jan. 20-24, and Jan. 29 to Feb. 28. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--10 years, 188 ft^3/s, 147.57 in/yr, 136,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,020 ft^3/s, Sept. 11, 1981, gage height, 7.04 ft, from rating curve extended above 720 ft^3/s; minimum daily, 3.3 ft^3/s, Feb. 14 and 15, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 900 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 27	1645	(a)	*3.47	June 23	0100	*668	2.61

(a) Backwater from ice.

Minimum daily discharge, 23 ft^3/s, Dec. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	280	60	24	50	55	276	57	90	402	454	230	280
2	440	54	24	45	50	188	50	112	331	444	304	252
3	290	51	23	42	46	159	52	135	301	350	367	183
4	350	50	26	39	43	297	57	157	323	319	367	144
5	310	48	32	36	40	227	81	173	402	346	331	123
6	200	47	38	35	38	155	86	178	459	402	402	117
7	130	46	31	54	37	115	98	206	504	393	346	108
8	110	44	29	65	36	98	135	249	479	346	266	99
9	160	42	27	120	35	87	97	197	474	346	215	101
10	260	41	26	135	34	75	75	159	459	367	206	139
11	195	40	25	90	33	66	62	146	376	371	273	136
12	197	39	25	105	32	64	58	148	304	354	308	110
13	350	42	25	140	31	63	49	125	308	338	354	92
14	416	70	25	178	30	58	45	117	393	338	290	80
15	246	55	27	123	29	56	43	127	464	371	194	72
16	176	46	37	86	29	53	44	153	412	350	157	66
17	206	40	85	71	28	52	47	176	402	363	221	61
18	173	37	240	65	28	58	50	178	407	376	194	56
19	137	35	420	58	27	63	70	227	367	363	155	53
20	108	33	370	54	27	132	142	246	346	389	133	51
21	92	31	320	50	27	224	119	233	384	407	119	56
22	83	30	350	52	27	159	100	218	504	354	108	344
23	81	29	250	56	27	123	83	200	614	327	263	568
24	84	28	200	70	45	97	70	250	499	342	367	354
25	78	27	155	182	230	83	65	426	367	346	283	237
26	71	26	120	231	250	83	64	520	290	386	206	173
27	68	26	100	103	340	103	76	547	338	316	173	126
28	62	25	84	76	470	114	73	440	407	269	169	105
29	73	25	70	55	---	97	73	416	440	218	243	98
30	78	24	62	49	---	80	78	464	435	188	188	91
31	71	---	56	44	---	64	---	430	---	181	162	---
TOTAL	5575	1191	3326	2559	2124	3569	2199	7443	12191	10714	7594	4475
MEAN	180	39.7	107	82.5	75.9	115	73.3	240	406	346	245	149
MAX	440	70	420	231	470	297	142	547	614	454	402	568
MIN	62	24	23	35	27	52	43	90	290	181	108	51
CFSM	10.4	2.30	6.19	4.77	4.39	6.65	4.24	13.9	23.5	20.0	14.2	8.61
IN.	11.99	2.56	7.15	5.50	4.57	7.67	4.73	16.00	26.21	23.04	16.33	9.62
AC-FT	11060	2360	6600	5080	4210	7080	4360	14760	24180	21250	15060	8880

CAL YR 1985 TOTAL 68587 MEAN 188 MAX 600 MIN 19 CFSM 10.9 IN 147.47 AC-FT 136000
WTR YR 1986 TOTAL 62960 MEAN 172 MAX 614 MIN 23 CFSM 9.94 IN 135.37 AC-FT 124900

15024800 STIKINE RIVER NEAR WRANGELL
(National stream-quality accounting network station)

LOCATION.--Lat 56°42'29", long 132°07'49", in SE¼SE¼ sec.35, T.59 S., R.84 E., Hydrologic Unit 19060000, on right bank about 10 mi upstream from mouth near Point Rothsay, 11 mi west of Alaska-British Columbia boundary, and 18 mi northeast of Wrangell.

DRAINAGE AREA.--19,920 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July 1976 to current year.

REVISED RECORDS.--WDR AK-78-1: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 8 to Apr. 28. Records good except for estimated daily discharges, which are poor. Satellite telemeter at station.

AVERAGE DISCHARGE.--10 years, 54,110 ft^3/s, 36.89 in/yr, 39,200,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 300,000 ft^3/s, Sept. 11, 1981, gage height, 28.22 ft; minimum daily, 4,500 ft^3/s, Mar. 20 and 21, 1978.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 184,000 ft^3/s, July 18, gage height, 23.65 ft; minimum daily, 5,200 ft^3/s, Feb. 22, 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52600	15700	6800	10100	10000	28000	10500	16300	99200	153000	114000	73800
2	60800	14600	6700	9600	12000	25000	9800	18300	98300	155000	128000	76800
3	55000	13800	6600	8900	13000	23000	9800	20600	92800	149000	133000	68800
4	52500	13000	6500	8400	12000	24000	10300	23200	88100	134000	131000	59700
5	51800	12000	6800	8000	11000	24500	12000	26700	93700	129000	123000	56400
6	41800	11500	7200	7700	10200	22000	13000	29300	111000	143000	128000	57500
7	35500	11600	7400	8000	9600	19000	14000	31400	130000	152000	134000	56000
8	31200	10900	6900	8400	9200	17000	13800	33600	145000	148000	127000	52600
9	30600	10300	6500	8700	8800	15000	12000	33200	147000	146000	113000	51800
10	33700	9800	6200	8800	8400	13500	11000	30500	138000	151000	110000	53000
11	32600	9400	6000	8400	8000	12600	9700	28700	120000	153000	121000	47000
12	30400	9700	5800	8000	7700	12000	9000	28200	104000	150000	132000	43600
13	34700	10900	5700	8400	7300	11800	8200	26500	96400	146000	137000	42200
14	37200	11500	5700	9400	7000	11500	7500	24500	101000	141000	139000	39300
15	32200	11200	5700	9200	6600	11400	7000	23800	119000	145000	110000	36800
16	29500	10500	6900	8900	6300	11300	7200	24300	132000	163000	90600	35200
17	30500	9900	8200	8500	6000	11300	7600	27100	144000	178000	83300	32300
18	27400	9600	11000	8300	5800	11800	8600	27900	145000	183000	77700	29600
19	25400	9200	16500	8000	5600	13000	10000	30000	139000	179000	74300	27700
20	22800	8900	21000	7800	5400	18000	12000	34000	136000	179000	63900	26800
21	21200	8600	24000	7600	5300	24000	12500	37300	132000	182000	58800	26500
22	20300	8300	26500	7400	5200	26000	12500	37700	132000	174000	56900	38300
23	20000	8100	24500	7200	5200	25000	12000	36600	142000	162000	61300	74200
24	19700	7900	19500	7000	5400	23000	11000	36300	140000	153000	72300	78800
25	18900	7700	16500	9200	6200	21000	10500	43800	122000	144000	65800	72500
26	17700	7500	14200	20500	9500	19000	11000	58700	103000	130000	63300	69800
27	17000	7300	13200	20000	16500	17500	12000	74200	103000	124000	68400	57800
28	16200	7100	12200	15000	27000	15500	13000	80000	119000	118000	74100	50000
29	16200	7000	11500	11500	---	14000	14800	84300	136000	110000	82400	45800
30	16700	6900	11000	9800	---	13000	15100	91400	148000	108000	80800	42300
31	16100	---	10600	9000	---	11800	---	96300	---	109000	71100	---
TOTAL	948200	300400	343800	295700	250200	545500	327400	1214700	3656500	4591000	3025000	1522900
MEAN	30590	10010	11090	9539	8936	17600	10910	39180	121900	148100	97580	50760
MAX	60800	15700	26500	20500	27000	28000	15100	96300	148000	183000	139000	78800
MIN	16100	6900	5700	7000	5200	11300	7000	16300	88100	108000	56900	26500
CFSM	1.54	.50	.56	.48	.45	.88	.55	1.97	6.12	7.44	4.90	2.55
IN.	1.77	.56	.64	.55	.47	1.02	.61	2.27	6.83	8.57	5.65	2.84
AC-FT	1881000	595800	681900	586500	496300	1082000	649400	2409000	7253000	9106000	6000000	3021000

CAL YR 1985 TOTAL 18244210 MEAN 49980 MAX 197000 MIN 5700 CFSM 2.51 IN 34.07 AC-FT 36190000
WTR YR 1986 TOTAL 17021300 MEAN 46630 MAX 183000 MIN 5200 CFSM 2.34 IN 31.79 AC-FT 33760000

15024800 STIKINE RIVER NEAR WRANGELL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1975 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 1976 to 1981. Once daily observations May 29 to October 11, 1982 (discontinued)
SUSPENDED SEDIMENT DISCHARGE: May 28 to October 12, 1982 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
OCT								
10...	1755	1050	98	7.90	4.0	749	11.4	88
10...	1756	850	107	7.90	4.5	749	10.9	85
10...	1757	700	117	8.00	4.0	749	11.0	85
10...	1758	550	120	8.00	4.0	749	11.0	85
10...	1759	350	118	8.00	4.0	749	10.9	85
APR								
29...	1330	955	146	7.70	5.0	762	11.8	92
29...	1335	885	153	7.60	5.0	762	12.7	99
29...	1340	760	182	7.50	5.0	762	13.4	105
29...	1345	635	183	7.60	5.0	762	14.1	110
29...	1350	510	183	7.60	5.0	762	14.0	110
29...	1355	385	183	7.50	5.0	762	13.8	108
29...	1400	260	180	7.60	5.0	762	15.2	119
29...	1405	135	181	7.60	5.0	762	12.0	94
29...	1410	10.0	183	7.70	5.5	762	13.0	103
JUL								
09...	1735	1260	97	7.40	10.0	--	--	--
09...	1748	1130	97	7.20	10.0	--	--	--
09...	1755	1010	100	6.80	10.0	--	--	--
09...	1805	880	99	7.10	10.0	--	--	--
09...	1810	755	100	7.20	10.0	--	--	--
09...	1816	630	98	7.00	10.0	--	--	--
09...	1821	505	100	7.10	10.0	--	--	--
09...	1825	380	99	7.40	10.0	--	--	--
09...	1829	255	97	7.40	10.0	--	--	--
SEP								
09...	1435	1130	100	7.00	8.0	756	11.2	95
09...	1440	1020	104	7.30	7.5	756	10.7	90
09...	1445	880	108	7.50	8.0	756	10.8	92
09...	1450	620	107	--	7.5	--	--	--
09...	1455	300	107	--	7.5	--	--	--

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)
OCT												
10...	1800	1100	34100	115	7.90	4.0	4.0	26	749	11.1	86	E1
APR												
29...	1145	960	14800	182	7.60	8.0	5.0	2.0	762	13.5	106	K1
JUL												
09...	1830	1370	146000	98	7.70	18.0	10.0	85	757	12.5	111	K10
SEP												
09...	1500	1200	51500	107	7.30	11.0	8.0	20	756	10.8	92	K2

E ESTIMATED
K NON-IDEAL COLONY COUNT

15024800 STIKINE RIVER NEAR WRANGELL--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
OCT 10...	E1	55	5	17	3.0	2.3	0.80	61	50	61	11	0.90
APR 29...	E1	80	8	25	4.2	4.9	1.2	73	72	89	15	4.3
JUL 09...	E1	40	9	13	1.9	1.1	0.80	31	31	38	8.3	0.30
SEP 09...	20	44	0	14	2.2	1.7	0.80	61	45	55	15	1.2

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)
OCT 10...	< 0.10	4.7	67	70	--	< 0.010	< 0.100	0.030	0.060	--	< 0.20	0.070
APR 29...	< 0.10	5.8	109	110	0.160	0.010	0.170	0.040	0.070	0.26	0.30	0.050
JUL 09...	< 0.10	3.2	49	48	--	< 0.010	< 0.100	0.070	0.070	0.23	0.30	0.160
SEP 09...	< 0.10	3.0	63	65	--	< 0.010	< 0.100	0.040	0.030	--	< 0.20	0.080

DATE	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT 10...	< 0.010	< 0.010	40	< 1	37	< 0.5	< 1	< 1	7	2	37	1
APR 29...	0.010	< 0.010	30	< 1	45	< 0.5	< 1	< 1	< 3	3	38	< 1
JUL 09...	0.020	0.010	40	< 1	26	< 0.5	8	< 1	< 3	4	13	< 5
SEP 09...	0.020	0.020	20	< 1	33	< 0.5	44	3	3	7	18	< 5

DATE	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT 10...	< 4	12	--	< 10	2	< 1	< 1	98	< 6	81	232
APR 29...	< 4	34	3.6	< 10	< 1	< 1	< 1	140	< 6	7	39
JUL 09...	< 4	8	--	< 10	< 1	< 1	< 1	71	< 6	16	271
SEP 09...	13	10	--	< 10	2	< 1	< 1	80	< 6	19	165

DATE	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)
OCT 10...	21400	64	--	--	--	--	--	--	--	--	--
APR 29...	1560	88	--	--	--	--	--	--	--	--	--
JUL 09...	107000	--	16	24	32	40	48	58	66	88	100
SEP 09...	22900	72	--	--	--	--	--	--	--	--	--

E ESTIMATED

15028300 FARRAGUT RIVER NEAR PETERSBURG

LOCATION.--Lat 57°10'24", long 133°06'36", in NE¼SW¼ sec.24, T.54 S., R.77 E., Hydrologic Unit 19060000, in Tongass National Forest, on left bank 2.2 mi upstream from mouth and 26 mi northwest of Petersburg.

DRAINAGE AREA.--151 mi².

PERIOD OF RECORD.--June 1977 to current year.

REVISED RECORDS.--WDR AK-80-1: 1977-78.

GAGE.--Water-stage recorder. Elevation of gage is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 9-12, Nov. 16 to Jan. 14, and Feb. 11 to Mar. 19. Records fair except for estimated daily discharges, which are poor. Streamflow affected by glaciers which cover 26 percent of the basin.

AVERAGE DISCHARGE.--9 years, 1,548 ft³/s, 139.22 in/yr, 1,122,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 16,400 ft³/s, Oct. 9, 1979, gage height, 15.23 ft, from rating curve extended above 8,500 ft³/s, but may have been higher Nov. 5, 1981 during period of no gage-height record; minimum daily discharge, 95 ft³/s, Feb. 22 and 23, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 6,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Aug. 13	0400	*6,270	*9.93				

Minimum daily discharge, 98 ft³/s, Dec. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3210	616	102	330	1040	2000	541	647	2250	2880	2600	3460
2	3930	506	100	300	1230	1400	476	721	2110	2740	3590	2570
3	2600	459	98	270	796	1450	639	791	1780	2270	3490	2090
4	3880	400	140	240	614	2600	592	870	1830	2060	3320	1820
5	2560	351	230	220	506	1900	980	918	2110	2210	3180	1760
6	1800	325	460	200	420	1100	881	915	2430	2440	4260	1690
7	1410	315	320	430	365	1200	1520	1000	3270	2490	3490	1580
8	1210	267	240	540	327	1700	1280	1270	3250	2380	2870	1510
9	1900	200	200	780	295	1600	783	1110	3160	2510	2570	1520
10	2630	185	170	1100	257	1200	602	928	2590	2630	2630	1810
11	1830	180	150	640	220	860	498	875	2080	2560	3390	1540
12	1660	195	140	950	200	740	420	951	1720	2500	3650	1420
13	2320	474	130	1950	170	640	372	764	1700	2530	5100	1280
14	2730	1640	180	1510	150	560	336	710	2320	2590	3230	1160
15	1580	591	240	1250	135	500	312	719	2510	2740	2440	1080
16	1360	330	500	851	125	470	329	905	2350	2690	2450	1000
17	1790	270	1100	721	118	450	555	1380	2410	2780	2590	907
18	1590	230	2500	643	114	500	488	1010	2490	2820	2080	836
19	1090	205	4500	560	110	570	1270	1350	2440	2950	1760	818
20	836	180	3600	508	107	3220	1620	1410	2300	3160	1550	807
21	731	165	2500	432	104	2430	983	1180	2420	3010	1440	913
22	708	150	3300	629	102	1520	814	1080	3330	2800	1370	3050
23	678	140	2200	592	100	1530	687	1020	3910	2960	2250	4720
24	704	130	1500	577	440	1140	587	1090	3190	3190	2510	2860
25	678	125	1200	3080	1300	957	530	1770	2370	3440	2280	2390
26	597	120	980	2870	1700	1010	561	2400	2020	3000	2140	1860
27	533	115	760	1640	2700	1180	621	2930	2220	4050	2160	1490
28	474	110	620	1020	4400	1480	546	2300	2570	3040	2930	1300
29	1330	106	540	764	---	1180	521	2350	2750	2450	3880	1160
30	948	104	460	623	---	909	541	2950	2680	2190	2620	1130
31	791	---	400	668	---	674	---	2190	---	2150	2600	---
TOTAL	50088	9184	29560	26888	18145	38670	20885	40504	74560	84210	86420	51531
MEAN	1616	306	954	867	648	1247	696	1307	2485	2716	2788	1718
MAX	3930	1640	4500	3080	4400	3220	1620	2950	3910	4050	5100	4720
MIN	474	104	98	200	100	450	312	647	1700	2060	1370	807
CFSM	10.7	2.03	6.32	5.74	4.29	8.26	4.61	8.66	16.5	18.0	18.5	11.4
IN.	12.34	2.26	7.28	6.62	4.47	9.53	5.15	9.98	18.37	20.75	21.29	12.69
AC-FT	99350	18220	58630	53330	35990	76700	41430	80340	147900	167000	171400	102200

CAL YR 1985 TOTAL 604451 MEAN 1656 MAX 5580 MIN 98 CFSM 11.0 IN 148.91 AC-FT 1199000
WTR YR 1986 TOTAL 530645 MEAN 1454 MAX 5100 MIN 98 CFSM 9.63 IN 130.73 AC-FT 1053000

15049900 GOLD CREEK NEAR JUNEAU

LOCATION.--Lat 58°18'26", long 134°23'12", in NE¼NW¼ sec.24, T.41 S., R.67 E., City and Borough of Juneau, Hydrologic Unit 19060000, on left bank at head of Last Chance Basin, 0.6 mi upstream from Basin Road bridge, and 1.1 mi east of Juneau.

DRAINAGE AREA.--8.41 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 350 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 8-10, Nov. 23 to Dec. 2, and Feb. 18-24. Records good.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,200 ft^3/s, Aug. 25, 1984, gage height, 5.27 ft, from rating curve extended above 660 ft^3/s; minimum discharge, 1.6 ft^3/s, Feb. 20, 1985, gage height, 2.08 ft, snowslide upstream caused temporary storage.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,030 ft^3/s, Aug. 13, gage height, 5.22 ft, from rating curve extended above 660 ft^3/s; minimum discharge, 7.3 ft^3/s, Dec. 31, gage height, 2.43 ft, snowslike upstream caused temporary storage.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	313	31	9.0	41	39	73	20	35	152	233	206	278
2	462	28	8.9	37	55	53	19	41	142	206	251	149
3	250	27	8.7	33	40	57	20	43	121	149	346	116
4	347	24	10	31	33	68	22	44	121	139	378	100
5	196	23	18	28	28	47	29	47	140	152	313	99
6	129	22	19	27	26	37	26	49	169	161	485	102
7	100	22	14	30	24	33	30	54	262	182	302	94
8	90	17	12	29	22	29	29	54	245	169	176	84
9	155	16	12	27	21	27	23	51	243	166	162	91
10	221	16	11	32	20	26	20	45	190	185	185	78
11	142	18	11	26	18	24	19	39	143	193	404	67
12	112	18	11	32	18	24	17	36	121	204	372	64
13	123	24	10	71	17	25	16	33	145	179	591	60
14	134	23	11	66	16	25	15	33	317	159	214	53
15	96	18	13	49	14	25	14	36	307	150	143	49
16	86	16	19	37	13	25	14	40	234	156	174	45
17	85	16	43	33	12	23	14	54	203	156	169	41
18	80	15	227	29	11	23	14	45	179	162	145	36
19	68	14	425	27	11	27	18	45	169	173	124	34
20	60	14	543	24	10	96	25	52	156	171	107	33
21	54	13	378	22	10	81	21	51	177	156	92	92
22	49	12	484	21	10	52	20	52	307	159	85	127
23	47	11	277	20	9.8	40	18	53	506	249	188	181
24	45	10	260	19	17	34	17	63	391	282	120	87
25	42	9.8	198	38	55	30	16	102	232	244	136	66
26	39	9.6	117	75	62	31	17	132	166	245	126	52
27	37	9.4	83	62	161	33	21	160	222	301	155	46
28	34	9.3	68	40	189	35	22	154	266	173	349	43
29	37	9.2	57	32	---	30	24	170	240	142	204	41
30	35	9.1	51	27	---	26	28	221	231	135	114	57
31	32	---	46	27	---	23	---	168	---	127	193	---
TOTAL	3700	504.4	3454.6	1092	961.8	1182	608	2202	6497	5658	7009	2465
MEAN	119	16.8	111	35.2	34.4	38.1	20.3	71.0	217	183	226	82.2
MAX	462	31	543	75	189	96	30	221	506	301	591	278
MIN	32	9.1	8.7	19	9.8	23	14	33	121	127	85	33
CFSM	14.2	2.00	13.2	4.19	4.09	4.53	2.41	8.44	25.8	21.8	26.9	9.77
IN.	16.36	2.23	15.28	4.83	4.25	5.23	2.69	9.74	28.73	25.02	31.00	10.90
AC-FT	7340	1000	6850	2170	1910	2340	1210	4370	12890	11220	13900	4890

CAL YR 1985 TOTAL 44182.8 MEAN 121 MAX 624 MIN 6.2 CFSM 14.4 IN 195.41 AC-FT 87640
WTR YR 1986 TOTAL 35333.8 MEAN 96.8 MAX 591 MIN 8.7 CFSM 11.5 IN 156.27 AC-FT 70080

15049900 GOLD CREEK NEAR JUNEAU--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--January 1985 to current year.

WATER QUALITY DATA, WATER OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)
OCT 16...	1400	83	4.0	4.0	<1	0.50
NOV 15...	1130	18	-4.5	1.0	5	0.40
DEC 02...	1107	9.0	-3.0	1.0	5	0.60
JAN 08...	1030	29	-2.0	2.0	3	0.40
FEB 11...	1030	19	-4.0	1.5	5	0.40
MAR 10...	1106	26	2.0	1.0	7	0.40
APR 17...	1025	14	4.0	2.5	2	0.80
MAY 13...	0945	32	5.5	3.5	10	1.0
JUN 16...	1410	221	14.0	5.0	5	1.1
JUL 21...	1300	155	12.5	4.5	5	1.0
AUG 15...	1200	140	11.0	5.5	5	0.30
SEP 17...	0951	42	11.0	4.0	5	0.60

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN 08...	1030	29	185	7.60	-2.0	2.0	3	0.40	E1	80	44
MAY 13...	0945	32	145	7.30	5.5	3.5	10	1.0	K1	67	33
JUL 21...	1300	155	65	7.20	12.5	4.5	5	1.0	E1	28	13

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
JAN 08...	21	6.7	1.2	36	36	44	48	0.90	<0.10	2.4	100
MAY 13...	18	5.3	1.1	33	34	42	36	0.90	<0.10	2.9	85
JUL 21...	8.3	1.8	0.70	15	15	18	13	0.39	0.05	1.4	38

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
JAN 08...	--	0.270	--	<1	33	<0.5	<1	<10	<3	<10	<3
MAY 13...	--	0.280	<0.010	<1	41	<0.5	<1	<10	<3	<10	<3
JUL 21...	0.030	--	0.010	<1	30	<0.5	<1	<10	<3	<10	7

E ESTIMATED
K NON-IDEAL COLONY COUNT

15049900 GOLD CREEK NEAR JUNEAU--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JAN 08...	< 10	< 4	< 1	< 0.1	< 10	1	< 1	130	< 6	19
MAY 13...	< 10	< 4	< 1	< 0.1	< 10	< 1	< 1	110	< 6	13
JUL 21...	10	< 4	2	< 0.1	< 10	< 1	< 1	44	< 6	6

15051008 SALMON CREEK ABOVE DIVERSION NEAR JUNEAU

LOCATION.--Lat 58°19'59", long 134°27'22", in NE¼NE¼ sec.9, T.41 S., R.67 E., City and Borough of Juneau, Hydrologic Unit 19060000, in Tongass National Forest, on left bank, about 0.3 mi upstream from mouth and 2.5 mi northwest of Juneau.

DRAINAGE AREA.--9.77 mi².

PERIOD OF RECORD.--June 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 100 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 9-11, Nov. 16 to Dec. 6 and Feb. 15-27. Records good except for estimated daily discharges, which are fair. Flow regulated by Salmon Creek Reservoir 2 mi upstream. Diversion upstream re-activated Dec. 17, 1984 for off-stream hydropower plant; outflow from the plant goes into Gastineau Channel and is not included in the discharge records.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 608 ft³/s, Sept. 7, 1983, gage height, 6.38 ft, from rating curve extended above 120 ft³/s; minimum daily discharge, 6.7 ft³/s, Dec. 2 and 3, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 302 ft³/s, Dec. 18, gage height, 5.29 ft, from rating curve extended above 120 ft³/s; maximum gage height, 5.42 ft, Feb. 25, backwater from ice; minimum daily discharge, 6.7 ft³/s, Dec. 2 and 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	79	17	6.8	23	22	45	11	16	62	68	50	65
2	130	16	6.7	19	31	33	11	18	63	57	56	41
3	76	15	6.7	18	21	28	13	20	53	45	81	32
4	130	14	7.6	17	17	55	14	20	53	43	112	27
5	72	13	12	16	15	29	21	22	59	47	77	25
6	49	13	13	16	13	21	21	24	69	58	95	24
7	39	12	10	35	13	19	24	29	98	54	64	21
8	36	11	8.9	25	12	16	21	33	78	48	44	19
9	51	10	8.5	23	12	16	15	28	80	46	41	22
10	75	10	8.[illegible]	28	11	16	12	23	64	52	42	20
11	53	9.7	[illegible]	20	10	15	11	20	48	59	90	17
12	44	12	[illegible].9	24	9.8	22	10	19	43	60	84	16
13	44	26	9.7	46	9.4	21	9.3	17	54	49	119	15
14	51	24	14	38	9.0	16	9.0	18	111	44	58	14
15	38	15	11	28	8.7	16	8.6	19	89	43	42	13
16	37	11	17	21	8.4	15	8.9	23	69	41	57	12
17	40	9.0	71	18	8.1	14	9.8	32	61	40	55	12
18	40	8.5	224	16	7.9	15	9.4	23	60	41	49	11
19	33	8.0	178	14	7.7	17	11	24	59	43	40	11
20	27	7.6	159	14	7.5	83	18	30	57	41	33	11
21	24	11	110	12	7.3	68	15	28	65	37	28	16
22	22	9.0	144	12	7.2	37	13	28	87	41	25	23
23	21	7.4	97	11	7.1	26	11	27	122	60	52	40
24	22	7.0	95	11	11	20	10	34	107	66	34	21
25	20	9.0	70	52	31	17	9.7	55	73	63	39	18
26	18	10	44	70	35	18	9.6	63	56	60	32	15
27	18	8.0	33	43	88	24	11	69	70	74	36	14
28	16	7.5	28	26	103	21	12	61	75	47	59	13
29	22	7.2	25	20	---	19	12	71	72	41	44	13
30	22	7.0	24	16	---	16	14	86	68	37	30	14
31	19	---	31	17	---	13	---	65	---	33	50	---
TOTAL	1368	344.9	1489.1	749	543.1	791	385.3	1045	2125	1538	1718	615
MEAN	44.1	11.5	48.0	24.2	19.4	25.5	12.8	33.7	70.8	49.6	55.4	20.5
MAX	130	26	224	70	103	83	24	86	122	74	119	65
MIN	16	7.0	6.7	11	7.1	13	8.6	16	43	33	25	11
AC-FT	2710	684	2950	1490	1080	1570	764	2070	4210	3050	3410	1220

CAL YR 1985 TOTAL 16328.8 MEAN 44.7 MAX 224 MIN 6.7 AC-FT 32390
WTR YR 1986 TOTAL 12711.4 MEAN 34.8 MAX 224 MIN 6.7 AC-FT 25210

15052009 LEMON CREEK NEAR MOUTH NEAR JUNEAU

LOCATION.--Lat 58°21'57", long 134°28'41", in SW¼SW¼ sec.26, T.40 S., R.66 E., City and Borough of Juneau, Hydrologic Unit 19060000, in Tongass National Forest, on right bank 1.0 mi upstream from mouth and 5 mi northwest of Juneau.

DRAINAGE AREA.--22.9 mi^2.

PERIOD OF RECORD.--October 1982 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 8-12, Nov. 16 to Dec. 5, Dec. 17, 18, Feb. 15-27, and Sept. 13-30. Records good except for estimated daily discharges, which are fair.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,510 ft^3/s, Aug. 23, 1983, gage height, 16.12 ft, from rating curve extended above 1,900 ft^3/s; maximum gage height, 16.37 ft, Nov. 26, 1985, backwater from ice; minimum daily discharge, 17 ft^3/s, Feb. 20 and Dec. 29 and 30, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,820 ft^3/s, Dec. 18, gage height, 15.59 ft; maximum gage height, 16.37 ft, Nov. 26, backwater from ice; minimum daily discharge, 25 ft^3/s, Dec. 2, 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	737	82	26	73	86	97	45	83	284	539	514	786
2	718	79	25	64	99	73	45	90	261	491	670	539
3	478	76	25	60	67	95	52	91	223	377	862	405
4	529	72	27	59	55	102	56	94	229	358	988	381
5	330	67	110	56	50	68	63	97	260	387	877	399
6	256	68	97	56	47	60	55	107	294	427	975	406
7	214	67	56	78	46	56	62	121	394	470	810	373
8	205	64	43	67	44	53	57	120	316	435	531	323
9	275	62	39	62	44	49	47	103	320	452	479	363
10	290	60	39	70	41	52	44	88	272	514	569	330
11	227	60	38	57	41	52	42	81	230	559	1040	306
12	198	63	35	69	41	54	42	80	205	555	908	266
13	190	74	36	146	39	58	42	74	232	523	1180	245
14	218	86	37	106	37	54	38	76	533	486	796	225
15	172	64	43	79	34	57	37	81	556	473	521	200
16	165	55	53	62	33	53	41	89	426	526	482	180
17	174	48	211	57	32	49	43	106	400	532	452	165
18	161	44	989	54	32	50	42	84	388	560	380	150
19	138	42	388	50	32	59	54	94	405	589	349	140
20	127	38	532	48	31	174	77	113	392	564	327	130
21	117	36	341	46	31	138	59	111	417	530	311	270
22	111	34	351	45	31	90	53	112	571	577	289	380
23	106	32	236	43	30	74	49	110	704	719	613	500
24	105	31	256	43	40	63	47	140	678	915	427	300
25	101	30	206	133	100	58	44	206	475	792	434	230
26	96	29	143	170	110	66	47	243	400	651	412	200
27	91	28	114	103	180	70	61	273	512	886	519	180
28	88	28	98	69	191	65	58	270	612	594	880	165
29	92	27	84	58	---	58	61	299	570	466	795	160
30	92	26	81	53	---	53	74	314	539	427	492	260
31	87	---	86	62	---	48	---	293	---	399	503	---
TOTAL	6888	1572	4845	2198	1644	2148	1537	4243	12098	16773	19385	8957
MEAN	222	52.4	156	70.9	58.7	69.3	51.2	137	403	541	625	299
MAX	737	86	989	170	191	174	77	314	704	915	1180	786
MIN	87	26	25	43	30	48	37	74	205	358	289	130
CFSM	9.69	2.29	6.81	3.10	2.56	3.03	2.24	5.98	17.6	23.6	27.3	13.1
IN.	11.19	2.55	7.87	3.57	2.67	3.49	2.50	6.89	19.65	27.25	31.49	14.55
AC-FT	13660	3120	9610	4360	3260	4260	3050	8420	24000	33270	38450	17770

CAL YR 1985	TOTAL 83237	MEAN 228	MAX 989	MIN 23	CFSM 9.96	IN 135.21	AC-FT 165100
WTR YR 1986	TOTAL 82288	MEAN 225	MAX 1180	MIN 25	CFSM 9.83	IN 133.67	AC-FT 163200

15052500 MENDENHALL RIVER NEAR AUKE BAY

LOCATION.--Lat 58°25'47", long 134°34'22", in NW¼SE¼ sec.6, T.40 S., R.66 E., City and Borough of Juneau, Hydrologic Unit 19060000, in Tongass National Forest, at north end of Mendenhall Lake, 1.2 mi north of Mendenhall Lake outlet, 4.1 mi northeast of Auke Bay, and 7 mi upstream from mouth at Fritz Cove.

DRAINAGE AREA.--85.1 mi².

PERIOD OF RECORD.--May 1965 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 60 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 15, 1983 at site 1.3 mi southeast at east end of Mendenhall Lake at same datum.

REMARKS.--Estimated daily discharges: May 25 to June 3 and June 5-27. Records good except for estimated daily discharges, which are fair. Streamflow is augmented and diurnal fluctuations are caused by meltage from Mendenhall Glacier that covers two-thirds of the basin.

AVERAGE DISCHARGE.--21 years, 1,094 ft³/s, 174.58 in/yr, 792,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft³/s, Sept. 8, 1981, gage height, 10.91 ft, from rating curve extended above 7,000 ft³/s; minimum daily, 19 ft³/s, Mar. 1-3, 1969 and Mar. 7-11, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,600 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 27	0145	4,700	6.62	Aug. 13	0900	*5,990	*7.33

Minimum discharge, 49 ft³/s, Feb. 22-24, gage height, 1.26 ft, minimum gage height, 1.14 ft., Dec. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2240	186	58	418	160	275	115	204	1090	2330	2650	3550
2	3070	174	56	334	187	252	99	244	1020	2260	3250	3140
3	2930	168	55	282	191	237	96	283	960	2040	3570	2410
4	2120	158	55	256	174	300	101	301	983	1920	4200	2020
5	1450	148	65	244	162	259	125	319	1120	2060	4070	2160
6	975	139	72	252	148	218	134	345	1350	2190	4180	2380
7	792	134	70	297	136	187	138	380	1600	2350	4240	2220
8	711	121	66	322	126	164	149	408	1400	2240	3400	1940
9	816	112	63	292	118	150	132	395	1250	2220	3260	1900
10	959	108	59	260	109	141	111	354	1120	2440	3500	1740
11	952	106	59	210	103	134	97	327	1000	2590	4760	1580
12	842	110	56	203	96	131	86	311	960	2660	4910	1520
13	717	120	54	228	91	133	83	280	1200	2550	5770	1420
14	745	145	54	267	87	136	74	273	2300	2370	4230	1390
15	674	138	64	258	80	145	69	269	2200	2290	2920	1450
16	557	122	73	230	72	150	72	271	1850	2530	2710	1350
17	532	111	104	216	66	147	79	301	1720	2650	2480	1190
18	504	103	336	203	60	145	80	298	1700	2930	2080	1040
19	433	95	671	192	56	146	86	303	1700	3170	1810	951
20	368	91	1010	177	53	225	122	351	1780	3090	1630	931
21	328	88	1020	157	52	316	129	384	2100	2740	1640	1080
22	297	84	1060	141	50	300	129	403	2600	2780	1600	1450
23	276	79	938	129	49	252	121	420	2900	3100	2050	1960
24	274	77	837	119	53	214	109	446	2600	3900	2180	2230
25	256	75	861	175	63	187	103	580	2100	4310	2360	2110
26	236	70	701	303	83	174	101	680	1850	4180	2290	1600
27	222	66	583	304	139	183	114	820	2140	4310	2460	1270
28	206	64	518	244	296	175	131	980	2430	3210	3560	1050
29	199	63	487	199	---	164	148	1090	2570	2830	4220	953
30	202	60	458	169	---	152	171	1120	2400	2520	3480	957
31	199	---	460	158	---	133	---	1120	---	2370	2750	---
TOTAL	25082	3315	11023	7239	3060	5925	3304	14260	51993	85130	98210	50942
MEAN	809	111	356	234	109	191	110	460	1733	2746	3168	1698
MAX	3070	186	1060	418	296	316	171	1120	2900	4310	5770	3550
MIN	199	60	54	119	49	131	69	204	960	1920	1600	931
CFSM	9.51	1.30	4.18	2.75	1.28	2.24	1.29	5.41	20.4	32.3	37.2	20.0
IN.	10.96	1.45	4.82	3.16	1.34	2.59	1.44	6.23	22.73	37.21	42.93	22.27
AC-FT	49750	6580	21860	14360	6070	11750	6550	28280	103100	168900	194800	101000

CAL YR 1985 TOTAL 277574 MEAN 760 MAX 3860 MIN 34 CFSM 8.93 IN 121.34 AC-FT 550600
WTR YR 1986 TOTAL 359483 MEAN 985 MAX 5770 MIN 49 CFSM 11.6 IN 157.14 AC-FT 713000

15052800 MONTANA CREEK NEAR AUKE BAY

LOCATION.--Lat 58°23'53", long 134°36'34", in SE¼SW¼ sec.13, T.40 S., R.65 E., City and Borough of Juneau, on right bank 30 ft upstream from highway bridge, 1.2 mi upstream from mouth at Mendenhall River, 1.5 mi northeast of Auke Bay, and 3.9 mi downstream from McGinnis Creek.

DRAINAGE AREA.--15.5 mi^2.

PERIOD OF RECORD.--August 1965 to September 1975, July 1983 to September 1986.

GAGE.--Water-stage recorder. Elevation of gage is 75 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Sept. 30, 1975, at site 50 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Nov. 4 to Dec. 20, Jan. 30, Feb. 4-6, 10-14, 16-28, Apr. 3-14, and July 13-18. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--13 years (water years 1966-75, 1984-1986), 104 ft^3/s, 91.12 in/yr, 75,350 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,920 ft^3/s, Aug. 23, 1966 and Aug. 24, 1974; maximum gage height, 16.77 ft, Aug. 23, 1966; minimum discharge, 3.2 ft^3/s, Feb. 8, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater then base discharge of 800 ft^3/s and maximun (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 19	2315	(a)	*15.23	Aug. 11	0815	*1,190	14.25

(a) Backwater from ice.

Minimum daily discharge, 11 ft^3/s, Nov. 28 to Dec. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	363	40	11	58	50	108	38	74	191	154	143	367
2	539	39	11	43	69	100	30	84	198	148	204	150
3	241	33	11	37	51	108	32	91	132	108	183	113
4	310	31	13	37	44	195	40	94	131	99	364	88
5	145	29	17	38	39	68	60	87	150	113	273	82
6	97	27	22	40	35	49	43	92	165	115	279	78
7	78	25	17	80	32	44	56	104	243	121	210	73
8	83	24	15	59	29	39	43	117	176	112	153	67
9	172	23	14	42	31	37	33	96	176	110	147	86
10	246	22	13	61	28	53	28	72	147	117	158	80
11	122	22	12	40	24	53	25	62	106	130	591	64
12	94	22	12	47	22	68	23	70	92	138	254	57
13	109	27	12	78	20	63	21	69	111	115	429	53
14	139	35	13	73	19	52	20	71	185	100	188	49
15	85	25	15	62	18	70	19	66	183	90	122	47
16	79	22	20	51	17	53	29	71	158	86	245	44
17	131	20	50	40	17	38	36	93	144	88	222	42
18	100	18	250	31	16	48	31	72	137	92	138	40
19	75	17	530	27	16	76	84	76	129	93	108	38
20	59	16	700	28	15	220	126	106	114	96	91	38
21	52	15	277	26	15	193	58	89	134	88	82	56
22	50	14	353	23	15	99	61	89	221	101	85	83
23	50	13	206	22	15	72	47	85	322	163	201	166
24	62	13	251	22	26	56	38	87	278	232	113	76
25	62	12	191	140	60	45	37	135	166	223	119	67
26	46	12	94	139	75	69	37	165	128	180	106	53
27	42	12	69	88	210	96	51	238	161	346	160	42
28	38	11	61	52	250	71	52	183	187	162	352	37
29	41	11	57	43	---	62	55	195	180	120	204	35
30	56	11	57	39	---	60	66	260	153	105	122	39
31	52	---	83	42	---	45	---	181	---	98	250	---
TOTAL	3818	641	3457	1608	1258	2410	1319	3374	4998	4043	6296	2310
MEAN	123	21.4	112	51.9	44.9	77.7	44.0	109	167	130	203	77.0
MAX	539	40	700	140	250	220	126	260	322	346	591	367
MIN	38	11	11	22	15	37	19	62	92	86	82	35
CFSM	7.94	1.38	7.23	3.35	2.90	5.01	2.84	7.03	10.8	8.39	13.1	4.97
IN.	9.16	1.54	8.30	3.86	3.02	5.78	3.17	8.10	11.99	9.70	15.11	5.54
AC-FT	7570	1270	6860	3190	2500	4780	2620	6690	9910	8020	12490	4580

CAL YR 1985 TOTAL 42636 MEAN 117 MAX 700 MIN 11 CFSM 7.55 IN 102.32 AC-FT 84570
WTR YR 1986 TOTAL 35532 MEAN 97.3 MAX 700 MIN 11 CFSM 6.28 IN 85.27 AC-FT 70480

15056100 SKAGWAY RIVER AT SKAGWAY

LOCATION.--Lat 59°28'02", long 135°17'00", in NE¼NW¼ sec. 12, T.28 S., R.59 E., City of Skagway, Hydrologic Unit 19060000, on left bank 800 ft downstream from highway bridge, on dike near end of 20th Street, and 1 mi upstream from mouth at Taiya Inlet.

DRAINAGE AREA.--145 mi^2, approximately.

PERIOD OF RECORD.--October 1963 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Mar. 3, 1976, at site 0.85 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Nov. 6 to Dec. 19, Dec. 28 to Jan. 3, Jan. 17-25, Jan. 30 to Feb. 2, Feb. 6-9, 16-25, Mar. 7-14, and Apr. 11-14. Records are poor. Streamflow is augmented and large diurnal fluctuations are caused by meltage from glaciers that cover 17 percent of the basin.

AVERAGE DISCHARGE.--23 years, 562 ft^3/s, 52.63 in/yr, 407,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,400 ft^3/s, Sept. 7, 1981, gage height, 19.25 ft, from rating curve extended above 2,500 ft^3/s; minimum discharge, 2.9 ft^3/s, Mar. 22, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
June 15	2045	3,370	16.96	Aug. 11	1015	*4,310	16.96
June 30	2400	3,620	*17.05	Aug. 28	1915	3,180	16.39
July 17	1945	3,420	16.83				

Minimum daily discharge, 16 ft^3/s, Feb. 21-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	455	69	20	75	50	122	27	171	1050	2950	1420	1290
2	457	66	20	64	54	90	26	213	755	2520	1710	1170
3	398	64	20	55	53	77	27	246	810	1980	1730	1050
4	359	49	20	57	42	71	34	265	1120	2430	1830	965
5	292	30	24	57	39	61	39	291	1490	2860	1620	973
6	238	29	40	55	34	59	39	350	1810	2800	1600	1010
7	202	28	37	54	32	54	54	336	1970	2560	1560	923
8	180	27	34	50	32	51	35	301	1850	2150	1230	809
9	241	26	31	42	39	50	29	247	1500	2150	1810	802
10	237	26	29	48	40	50	24	217	1160	2230	2800	749
11	202	26	27	47	29	50	22	192	761	2360	3660	655
12	170	32	26	42	36	50	21	187	728	2270	2580	608
13	161	39	25	53	39	52	21	193	1260	1850	2760	572
14	167	45	24	67	37	56	23	264	1910	1580	1780	564
15	149	42	26	64	22	61	28	246	2690	1840	1270	516
16	136	39	29	49	21	66	29	219	2840	2560	1110	487
17	136	36	35	47	19	64	30	213	2660	2900	1020	464
18	123	33	50	44	18	59	31	202	2330	2650	1010	442
19	113	31	80	41	17	57	34	218	1890	2420	921	420
20	109	30	271	39	17	60	35	327	1840	2390	892	431
21	101	28	332	38	16	88	36	348	1620	2140	880	559
22	96	27	329	37	16	84	38	350	1640	1790	816	678
23	90	26	276	36	16	68	37	364	1580	1800	792	1020
24	87	25	413	36	18	58	36	462	1310	1730	663	817
25	85	24	373	90	36	56	37	716	1090	1300	730	571
26	83	23	165	105	84	53	38	966	1340	1180	919	482
27	76	23	103	85	78	48	49	1220	2230	1150	1360	435
28	69	22	92	69	137	41	63	1170	2650	1180	2750	414
29	72	22	88	60	---	43	109	1200	2710	1230	2210	409
30	72	21	86	50	---	41	144	1270	2480	1160	1320	402
31	70	---	84	47	---	32	---	1190	---	1190	1150	---
TOTAL	5426	1008	3209	1703	1071	1872	1195	14134	51074	63300	47903	20687
MEAN	175	33.6	104	54.9	38.3	60.4	39.8	457	1702	2042	1545	690
MAX	457	69	413	105	137	122	144	1270	2840	2950	3660	1290
MIN	69	21	20	36	16	32	21	171	728	1150	663	402
CFSM	1.21	.23	.72	.38	.26	.42	.27	3.15	11.7	14.1	10.7	4.76
IN.	1.39	.26	.82	.44	.27	.48	.31	3.63	13.10	16.24	12.29	5.31
AC-FT	10760	2000	6370	3380	2120	3710	2370	28070	101300	125600	95020	41030

CAL YR 1985 TOTAL 205542 MEAN 563 MAX 3810 MIN 18 CFSM 3.88 IN 52.73 AC-FT 407700
WTR YR 1986 TOTAL 212602 MEAN 582 MAX 3660 MIN 16 CFSM 4.01 IN 54.54 AC-FT 421700

15056560 KLEHINI RIVER NEAR KLUKWAN

LOCATION.--Lat 59°24'47", long 135°59'49", in NE¼SE¼ sec.26, T.28 S., R.55 E., Haines Borough, Hydrologic Unit 19060000, in Tongass National Forest, on left bank immediately upstream from bridge near mi 26.2 Haines Highway, and 3.8 mi west of Klukwan.

DRAINAGE AREA.--245 mi^2.

PERIOD OF RECORD.--October 1981 to current year.

GAGE.--Water-stage recorder. Datum of gage is 100.00 ft above National Geodetic Vertical Datum of 1929. Prior to November 1982 at site on left bank 800 ft upstream at datum 20.72 ft higher. November 1982 to Oct. 20, 1983 at site on right bank 0.2 mi upstream.

REMARKS.--Estimated daily discharges: Nov. 6-13, 17, Nov. 19 to Dec. 3, Dec. 27-30, Jan. 3, 17-25, Jan. 28 to Feb. 1, Feb. 5-8, 15-25, Mar. 3-9, and Apr. 10-16. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--5 years, 1,440 ft^3/s, 79.82 in/yr, 1,043,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, about 9,000 ft^3/s, Oct. 15, 1981; minimum discharge, 53 ft^3/s, Mar. 26, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 7,980 ft^3/s, June 30, gage height, 83.61 ft; minimum daily, 130 ft^3/s, Feb. 22-24.

Peak discharges greater than base discharge of 5,000 ft^3/s for the period of record were computed and are tabulated below: Annual maximum (*) discharges are also shown.

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 15, 1981	Unknown	*Unknown	*Unknown	July 28, 1983	Unknown	Unknown	Unknown
June 13, 1982	0015	5,170	a 63.27	Aug. 11, 1983	Unknown	Unknown	Unknown
June 19, 1982	2230	7,470	a 63.19	Aug. 22, 1983	Unknown	Unknown	Unknown
June 28, 1982	2300	8,770	a 64.24				
July 8, 1982	0100	8,030	a 64.12	June 20, 1984	2400	*4,820	*83.04
July 25, 1982	2130	7,370	a 64.01				
Aug. 13, 1982	2130	6,050	a 63.74	July 20, 1985	2315	c*4,190	c*82.70
Sept. 6, 1982	2230	5,930	a 63.73				
Sept.16, 1982	Unknown	Unknown	Unknown	June 15, 1986	2230	6,080	83.01
Sept.30, 1982	Unknown	Unknown	Unknown	June 30, 1986	2400	*7,980	*83.61
				July 5, 1986	0100	7,650	83.51
Oct. 10, 1982	Unknown	Unknown	Unknown	July 17, 1986	2130	7,150	83.36
Oct. 13, 1982	Unknown	*Unknown	*Unknown	Aug. 10, 1986	1700	5,660	82.95
June 26, 1983	0800	7,720	b 87.70				

a At different site and datum.
b At different site.
c Maximum recorded, but may have been higher during period of estimated daily discharge, Aug. 8-15, 1985.

15056560 KLEHINI RIVER NEAR KLUKWAN--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	878	363	150	283	205	386	232	423	2290	7040	4080	2700
2	895	366	150	252	323	318	233	502	1950	6500	4420	2510
3	759	368	180	250	300	290	239	562	1990	5600	4760	2310
4	780	368	299	305	231	270	238	605	2200	6110	4650	2190
5	679	316	382	298	215	255	257	634	2700	6780	4350	2200
6	614	240	427	293	200	245	264	701	2940	6410	3690	2230
7	588	200	386	314	200	240	266	757	3170	6100	3440	2210
8	564	190	335	312	210	240	235	772	3100	5550	3220	2070
9	566	180	299	300	251	245	213	737	3130	5220	3910	1970
10	576	170	290	289	210	254	205	719	2640	5030	5060	1830
11	561	170	287	288	211	249	200	697	1860	4980	4820	1750
12	547	230	274	271	235	259	195	682	1740	5300	3960	1670
13	530	320	269	294	233	253	195	785	2230	5030	3870	1650
14	534	350	265	340	230	252	195	779	3270	4910	3340	1650
15	497	300	262	329	190	258	195	876	4350	5010	2960	1620
16	476	267	258	283	170	253	210	919	4980	5660	2800	1540
17	481	240	259	250	155	247	221	890	4560	6260	2590	1510
18	478	214	269	235	145	246	231	861	4170	6230	2500	1470
19	473	205	301	230	140	252	237	868	3870	6080	2360	1430
20	440	195	468	225	135	264	245	1020	3820	5340	2290	1400
21	432	185	563	220	135	259	249	1030	3850	5350	2240	1450
22	419	175	529	215	130	252	249	1120	4140	4950	2180	1540
23	414	170	495	210	130	245	236	1220	4210	5220	2180	1910
24	410	165	594	210	130	236	232	1250	3680	5550	2020	1500
25	411	160	583	240	200	240	234	1510	3250	4890	2050	1300
26	405	160	432	296	340	251	246	1840	3360	4490	2180	1170
27	381	155	370	282	319	259	247	2050	4720	4170	2520	1060
28	358	155	355	250	406	276	273	2230	6450	4160	3490	1010
29	388	150	340	230	---	281	318	2340	6360	4290	3700	952
30	384	150	340	220	---	267	389	2460	7120	4170	3240	910
31	382	---	335	210	---	239	---	2540	---	4040	2840	---
TOTAL	16300	6877	10746	8224	5979	8081	7179	34439	108100	166420	101710	50712
MEAN	526	229	347	265	214	261	239	1111	3603	5368	3281	1690
MAX	895	368	594	340	406	386	389	2540	7120	7040	5060	2700
MIN	358	150	150	210	130	236	195	423	1740	4040	2020	910
CFSM	2.15	.94	1.42	1.08	.87	1.07	.98	4.54	14.7	21.9	13.4	6.90
IN.	2.47	1.04	1.63	1.25	.91	1.23	1.09	5.23	16.41	25.27	15.44	7.70
AC-FT	32330	13640	21310	16310	11860	16030	14240	68310	214400	330100	201700	100600

CAL YR 1985 TOTAL 404625 MEAN 1109 MAX 4100 MIN 109 CFSM 4.53 IN 61.44 AC-FT 802600
WTR YR 1986 TOTAL 524767 MEAN 1438 MAX 7120 MIN 130 CFSM 5.87 IN 79.68 AC-FT 1041000

15067900 UPPER MAHONEY LAKE OUTLET NEAR KETCHIKAN

LOCATION.--Lat 55°24'50", long 131°33'16", in SE¼NE¼ sec.34, T.74 S., R.91 E., Gateway Borough, Hydrologic Unit 19060000, on Revillagigedo Island, in Tongass National Forest, on right bank 300 ft upstream from lake outlet and 6 mi northeast of Ketchikan.

DRAINAGE AREA.--2.03 mi².

PERIOD OF RECORD.--October 1977 to current year.

REVISED RECORDS.--WDR AK-82-1: 1979 (M), 1981 (M).

GAGE.--Water-stage recorder. Elevation of gage is 1,950 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 27 to Jan. 29 and Feb. 17-23. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--9 years, 41.7 ft³/s, 278.96 in/yr, 30,210 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 965 ft³/s, Oct. 29, 1983, gage height, 8.10 ft, from rating curve extended above 130 ft³/s; minimum discharge, 0.44 ft³/s, Dec. 30, 1983, gage height, 3.64 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 22	1115	*361	*6.49	No peak greater than base discharge.			

Minimum daily discharge, 1.2 ft³/s, Dec. 1, 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11	7.5	1.2	4.4	31	92	6.8	14	57	218	83	57
2	39	6.7	1.2	4.1	65	47	9.4	15	47	116	72	42
3	26	6.4	1.4	3.9	32	88	16	18	46	73	58	25
4	74	6.3	1.8	3.7	19	114	17	24	64	62	51	19
5	39	7.1	8.0	3.6	13	72	18	27	78	61	50	15
6	17	6.2	9.4	4.7	8.9	59	18	29	83	60	50	14
7	9.7	5.2	7.0	6.2	6.9	88	59	26	103	57	45	12
8	6.5	4.4	5.4	8.3	5.7	130	69	28	113	56	35	11
9	32	3.4	4.4	11	4.8	63	39	25	232	66	30	9.9
10	68	2.9	3.5	14	4.4	35	24	20	114	117	32	10
11	47	2.4	2.9	15	3.9	23	15	22	69	121	38	12
12	68	2.2	2.6	45	3.6	28	11	24	51	112	43	11
13	57	4.3	2.4	170	3.2	29	8.8	18	53	87	47	9.0
14	47	68	2.7	90	3.0	24	7.7	14	92	61	37	7.4
15	25	45	3.0	40	2.9	17	7.2	13	120	54	26	6.2
16	53	21	5.6	20	2.8	14	6.5	29	82	59	20	5.5
17	65	10	10	10	2.7	13	6.9	74	89	64	41	4.9
18	52	6.6	30	8.5	2.6	15	8.7	81	83	57	36	4.6
19	40	4.6	72	7.8	2.5	105	93	124	73	62	24	4.3
20	27	3.9	110	7.3	2.5	251	124	87	78	71	18	4.0
21	20	3.2	88	7.0	2.4	146	54	48	146	72	16	4.1
22	26	2.7	140	6.9	2.4	57	27	36	238	62	15	128
23	20	2.3	65	6.8	3.0	31	19	31	134	56	17	193
24	14	2.1	30	6.8	88	23	15	67	91	48	29	51
25	9.6	1.7	15	40	152	24	11	202	62	42	25	61
26	9.2	1.6	9.4	120	142	27	14	183	55	38	20	37
27	11	1.5	7.8	54	173	24	18	283	65	49	17	19
28	12	1.4	6.8	34	243	19	12	132	74	52	17	26
29	19	1.3	6.0	23	---	11	9.4	114	72	38	17	38
30	18	1.3	5.2	13	---	8.5	10	100	80	30	16	23
31	11	---	4.8	12	---	7.6	---	72	---	43	19	---
TOTAL	973.0	243.2	662.5	801.0	1026.2	1685.1	754.4	1980	2744	2164	1044	863.9
MEAN	31.4	8.11	21.4	25.8	36.7	54.4	25.1	63.9	91.5	69.8	33.7	28.8
MAX	74	68	140	170	243	251	124	283	238	218	83	193
MIN	6.5	1.3	1.2	3.6	2.4	7.6	6.5	13	46	30	15	4.0
CFSM	15.5	4.00	10.5	12.7	18.1	26.8	12.4	31.5	45.1	34.4	16.6	14.2
IN.	17.82	4.45	12.13	14.67	18.80	30.86	13.82	36.27	50.26	39.64	19.12	15.82
AC-FT	1930	482	1310	1590	2040	3340	1500	3930	5440	4290	2070	1710

CAL YR 1985	TOTAL	13822.5	MEAN 37.9	MAX 286	MIN 1.2	CFSM 18.7	IN 253.17	AC-FT	27420
WTR YR 1986	TOTAL	14941.3	MEAN 40.9	MAX 283	MIN 1.2	CFSM 20.1	IN 273.67	AC-FT	29640

15070000 SWAN LAKE NEAR KETCHIKAN

LOCATION.--Lat 55°36'54", long 131°20'14", in SW¼ NE¼ sec. 20, T.72 S., R.92 E., Gateway Borough, Hydrologic Unit 19060000, on Revillagigedo Island, in Tongass National Forest, 0.7 mi upstream from mouth at Carroll Inlet, and 22 mi northeast of Ketchikan.

DRAINAGE AREA.--36.5 mi^2.

PERIOD OF RECORD.--September 1916 to January 1926, September 1927 to December 1933 and October 1946 to September 1959 (discharge). Published as "Swan Lake Outlet at Carrol Inlet" prior to 1946 and as "Falls Creek near Ketchikan" October 1946 to September 1959. Monthly discharges only for some periods, published in WSP 1372. October 1984 to current year (month end reservoir contents and monthly discharges).

REVISED RECORDS.--WSP 1372: Drainage area, 1918.

GAGE.--Non-recording lake-level staff gage. Datum of lake-level staff gage is at National Geodetic Vertical Datum of 1929. Totalizing MWH meters on the two turbines in Swan Lake Powerhouse. September 1916 to January 1926 and September 1927 to December 1933 at site 1,500 ft downstream at different datum. October 1946 to September 1959, recording gage at site 2,500 ft downstream, elevation of gage was 130 ft above NVGD, from topographic map.

REMARKS.--Reservoir is formed by a concrete arch dam located at the outlet of Swan Lake, construction began in August 1980 and was completed in March 1983. Total and useable capacity below spillway crest of 330 ft are 126,200 and 82,800 acre/ft respectively, Reservoir is used for power. Discharge released through turbines is computed from relation between discharge, head, and power generation; release flow enters directly into Carroll Inlet and is not returned to stream. Spill is computed from a theoretical relation between discharge and stage above crest of the spillway. Turbine and spillway ratings and reservoir capacity table furnished by the City of Ketchikan in 1985.

COOPERATION.--Reservoir elevations and release flow provided by the City of Ketchikan.

AVERAGE DISCHARGE.--30 years (water years 1917-25, 1928-33, 1947-59, 1985-86), 458 ft^3/s, 170.40 in/yr, 331,800 acre-ft/yr. Mean discharge for water year 1985-86 adjusted for change in contents of Swan Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum contents observed, 131,700 acre-ft, Oct. 8, 1984, elevation, 333.8 ft; minimum contents observed, 104,200 acre-ft, Dec. 15, 1985, elevation, 314.8 ft. Maximum discharge, about 5,500 ft^3/s, Nov. 1, 1917; minimum daily, 19 ft^3/s, Feb. 21-25, 1925. Maximum daily discharge since construction of dam, 3,180 ft^3/s, Oct. 8, 1984, minimum daily release from reservoir, no flow, Dec. 1, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum contents observed, 129,400 acre-ft, May 27, elevation, 332.2 ft; minimum contents observed, 104,200 acre-ft., Dec. 15, elevation, 314.8 ft. Maximum daily discharge, 1,480 ft^3/s, May 27, minimum daily release, 88 ft^3/s, Sept. 17.

MONTH END RESERVOIR ELEVATION, IN FEET NGVD, AND CONTENTS, IN ACRE FEET
WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
OCT. 31	330.6	127000	+ 1000
NOV. 30	321.6	114000	-13000
DEC. 31	322.1	114700	+ 700
JAN. 31	330.2	126500	+11800
FEB. 28	331.6	128400	+ 1900
MAR. 31	330.5	126900	- 1500
APR. 30	330.3	126600	- 300
MAY 31	331.2	127900	+ 1300
JUN. 30	330.7	127200	- 700
JUL. 31	329.9	126000	- 1200
AUG. 31	328.5	124000	- 2000
SEP. 30	328.2	123600	- 400
		CAL YR 1985	- 3200
		WTR YR 1986	- 2400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

MONTH	RELEASE	SPILL	TOTAL	ADJUSTED
OCT.	206	219	426	442
NOV.	356	4.5	361	143
DEC.	347	0	347	358
JAN.	232	74	306	498
FEB.	232	96	328	362
MAR.	213	497	710	686
APR.	195	171	366	361
MAY	179	360	539	560
JUN.	181	407	588	576
JUL.	189	150	339	319
AUG.	186	41	227	194
SEP.	201	0	201	194
CAL YR 1985	241	181	423	418
WTR YR 1986	226	169	396	393

15072000 FISH CREEK NEAR KETCHIKAN

LOCATION.--Lat 55°23'31", long 131°11'38", in SW¼SW¼ sec.6, T.75 S., R.94 E., Gateway Borough, Hydrologic Unit 19060000, on Revillagigedo Island, in Tongass National Forest, on right bank 250 ft upstream from outlet of Low Lake, 750 ft upstream from mouth at Thorne Arm, and 18 mi east of Ketchikan.

DRAINAGE AREA.--32.1 mi^2, excludes that of Granite Lake drainage basin.

PERIOD OF RECORD.--May 1915 to October 1936, October 1938 to current year. Prior to October 1945, monthly discharge only. Prior to January 1921, published as "near Sea Level, Revillagigedo Island."

REVISED RECORDS.--WSP 1372: 1918.

GAGE.--Water-stage recorder. Elevation of gage is 20 ft, by barometer. Prior to October 1935, at site 50 ft downstream at different datum. October 1935 to Oct. 3, 1975, at prior site and present datum.

REMARKS.--Estimated daily discharges: Nov. 27 to Dec. 1 and Feb. 18-22. Records good except those for Feb. 26-27, which are fair.

AVERAGE DISCHARGE.--68 years, 419 ft^3/s, 177.26 in/yr, 303,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,400 ft^3/s, Oct. 15, 1961, gage height, 8.85 ft, site then in use, from rating curve extended above 3,600 ft^3/s; minimum daily, 20 ft^3/s, Sept. 9 and 10, 1928.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Feb. 28	1415	*2,070	*3.42	No peak greater than base discharge.			

Minimum discharge, 37 ft^3/s, Dec. 1-3; minimum gage height, 0.65 ft, Dec. 2 and 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	166	401	37	224	292	1580	298	194	382	276	173	126
2	201	319	37	188	347	1100	270	182	339	299	214	154
3	275	269	37	157	417	989	334	177	299	298	257	174
4	299	249	54	134	385	1170	357	183	279	274	276	175
5	325	234	60	119	325	1080	338	200	283	246	297	160
6	297	213	85	117	269	904	354	209	304	221	290	139
7	240	207	84	209	214	806	466	216	321	202	272	123
8	194	204	80	208	178	852	892	224	341	189	242	109
9	213	175	77	502	161	1020	768	233	399	181	207	99
10	412	149	68	661	139	817	535	226	487	195	179	91
11	688	123	61	722	120	562	380	209	445	235	158	90
12	712	105	54	782	103	433	289	236	367	270	152	95
13	767	133	52	737	90	361	231	250	313	288	169	96
14	736	515	60	970	81	309	193	234	293	300	189	90
15	601	624	66	1000	74	267	170	213	400	286	186	83
16	512	510	81	686	68	232	153	219	467	261	165	76
17	619	368	100	523	64	211	148	349	476	235	154	71
18	728	274	152	473	61	256	191	460	498	212	196	63
19	711	206	177	446	58	378	339	645	448	192	214	56
20	574	154	143	408	56	700	542	724	419	180	195	50
21	464	117	957	374	55	997	566	649	390	172	165	47
22	384	91	1380	447	55	908	449	536	447	164	141	136
23	375	75	1210	421	64	722	346	431	624	154	129	1120
24	376	61	827	451	106	509	281	398	717	144	150	1060
25	359	52	593	909	179	458	234	508	567	138	186	676
26	339	45	448	1290	372	522	208	647	430	131	194	490
27	308	42	349	1140	1780	608	245	725	346	137	176	354
28	283	40	271	815	1960	644	259	674	306	160	153	286
29	464	39	234	550	---	617	247	561	286	179	133	296
30	585	38	211	399	---	483	218	486	269	179	117	268
31	519	---	243	317	---	372	---	435	---	165	107	---
TOTAL	13726	6032	8288	16379	8073	20867	10301	11633	11942	6563	5836	6853
MEAN	443	201	267	528	288	673	343	375	398	212	188	228
MAX	767	624	1380	1290	1960	1580	892	725	717	300	297	1120
MIN	166	38	37	117	55	211	148	177	269	131	107	47
CFSM	13.8	6.26	8.32	16.4	8.97	21.0	10.7	11.7	12.4	6.60	5.86	7.10
IN.	15.91	6.99	9.60	18.98	9.36	24.18	11.94	13.48	13.84	7.61	6.76	7.94
AC-FT	27230	11960	16440	32490	16010	41390	20430	23070	23690	13020	11580	13590

CAL YR 1985 TOTAL 126376 MEAN 346 MAX 1580 MIN 37 CFSM 10.8 IN 146.45 AC-FT 250700
WTR YR 1986 TOTAL 126493 MEAN 347 MAX 1960 MIN 37 CFSM 10.8 IN 146.59 AC-FT 250900

15081580 BLACK BEAR LAKE OUTLET NEAR KLAWOCK

LOCATION.--Lat 55°33'25", long 132°52'33", in SW¼NE¼ sec.12, T.73 S., R.82 E., Hydrologic Unit 19060000, on Prince of Wales Island, in Tongass National Forest, on left bank at outlet of Black Bear Lake 8.6 mi east of Klawock.

DRAINAGE AREA.--1.82 mi².

PERIOD OF RECORD.--June 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,700 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges, Feb. 16-21. Records fair.

AVERAGE DISCHARGE.--6 years, 27.8 ft³/s, 207.44 in/yr, 20,140 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 413 ft³/s, Nov. 5, 1981, gage height, 7.13 ft, from rating curve extended above 100 ft³/s; minimum, 2.1 ft³/s, Sept. 21, 1986; minimum gage height, 4.02 ft, Dec. 29 and 30, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 150 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 28	0300	*178	*6.00	Sept.23	0515	153	5.86

Minimum discharge, 2.1 ft³/s, Sept. 21, gage height, 4.10 ft; minimum gage height, 4.08 ft, Dec. 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	30	11	2.5	12	29	74	11	11	33	31	15	14
2	60	10	2.5	9.8	40	46	9.7	11	30	36	19	16
3	48	11	2.7	8.5	30	59	12	13	28	30	21	13
4	61	10	3.0	8.2	22	79	12	16	33	24	21	11
5	46	9.8	9.8	7.3	18	50	16	17	39	22	21	8.8
6	26	9.5	11	7.9	15	38	18	19	44	22	27	7.8
7	18	9.2	10	11	12	39	27	19	44	21	24	6.9
8	14	7.6	8.8	12	11	48	34	22	42	19	19	6.0
9	34	6.2	7.3	18	9.3	37	25	21	51	19	15	5.5
10	62	5.2	6.0	22	8.3	25	18	18	41	30	14	5.0
11	42	4.6	5.2	22	7.6	21	13	16	30	33	13	5.1
12	52	4.1	4.8	45	6.9	22	11	18	24	29	14	4.8
13	80	8.1	4.6	109	6.3	22	9.0	15	23	26	16	4.3
14	61	32	5.0	83	5.6	20	7.8	13	29	22	14	3.9
15	34	26	5.2	48	4.8	17	7.2	12	33	19	12	3.6
16	37	18	7.6	29	4.5	14	6.9	17	28	18	11	3.3
17	57	13	12	21	4.2	12	7.3	28	25	18	11	2.9
18	49	9.8	23	17	4.0	11	8.5	28	28	17	11	2.7
19	37	8.5	63	16	3.9	26	23	36	28	16	11	2.5
20	26	6.8	71	14	3.8	60	43	40	29	16	9.4	2.2
21	21	5.7	64	14	3.7	69	31	30	37	16	8.1	2.4
22	22	5.2	87	14	3.7	44	23	24	59	16	7.2	57
23	21	4.8	51	14	5.4	30	17	21	69	15	9.1	131
24	19	4.3	36	14	83	22	15	31	53	14	13	71
25	16	3.7	28	54	145	20	12	57	35	14	13	40
26	15	3.4	21	78	133	18	14	74	26	13	11	26
27	15	3.0	16	51	124	20	16	96	23	21	9.7	18
28	13	2.8	14	33	140	22	13	67	23	27	8.7	17
29	16	2.7	14	22	---	19	11	54	23	21	8.1	19
30	16	2.5	12	18	---	17	10	48	23	16	7.3	17
31	14	---	13	15	---	14	---	39	---	14	7.9	---
TOTAL	1062	258.5	621.0	847.7	884.0	1015	481.4	931	1033	655	421.5	527.7
MEAN	34.3	8.62	20.0	27.3	31.6	32.7	16.0	30.0	34.4	21.1	13.6	17.6
MAX	80	32	87	109	145	79	43	96	69	36	27	131
MIN	13	2.5	2.5	7.3	3.7	11	6.9	11	23	13	7.2	2.2
CFSM	18.8	4.74	11.0	15.0	17.4	18.0	8.79	16.5	18.9	11.6	7.47	9.67
IN.	21.69	5.28	12.69	17.32	18.06	20.73	9.83	19.02	21.10	13.38	8.61	10.78
AC-FT	2110	513	1230	1680	1750	2010	955	1850	2050	1300	836	1050

CAL YR 1985 TOTAL 10638.3 MEAN 29.1 MAX 137 MIN 2.5 CFSM 16.0 IN 217.32 AC-FT 21100
WTR YR 1986 TOTAL 8737.8 MEAN 23.9 MAX 145 MIN 2.2 CFSM 13.1 IN 178.50 AC-FT 17330

15083500 PERKINS CREEK NEAR METLAKATLA

LOCATION.--Lat 54°56'48", long 132°10'15", in NW¼SW¼ sec.9, T.80 S., R.88 E., Hydrologic Unit 19060000, on Prince of Wales Island, in Tongass National Forest, on right bank 1,000 ft upstream from mouth at South Arm of Moria Sound, 27 mi southwest of Metlakatla, and 35 mi southwest of Ketchikan.

DRAINAGE AREA.--3.38 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1976 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 18 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 18 to Jan. 17 and Feb. 13-23. Records good below 150 ft³/s and fair above, except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--10 years, 34.4 ft³/s, 138.21 in/yr, 24,920 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 1,460 ft³/s, Oct. 6, 1984, gage height, 5.66 ft, from rating curve extended above 80 ft³/s, but may have been higher Nov. 22, 1984, during period of no gage-height record; minimum daily, 1.1 ft³/s, Sept. 19-21, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 553 ft³/s, Jan. 24, gage height, 3.90 ft, from rating curve extended above 80 ft³/s; minimum discharge, 0.97 ft³/s, Sept. 21, gage height, 0.87 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	20	18	4.3	11	119	76	32	12	9.2	75	9.3	22
2	28	55	4.3	10	49	105	44	10	7.9	56	12	8.3
3	9.4	23	4.2	8.6	20	111	43	9.5	6.8	19	7.7	9.6
4	46	18	8.5	8.0	41	34	56	8.6	6.0	9.2	6.2	8.1
5	12	40	30	7.6	34	46	38	7.9	5.5	6.7	5.6	4.8
6	7.4	43	23	30	18	70	23	7.2	4.7	5.5	5.8	3.5
7	5.8	40	17	90	13	110	49	6.7	4.6	4.9	4.6	2.8
8	7.8	18	13	45	11	77	32	7.0	5.0	4.4	3.8	2.4
9	99	10	10	200	10	51	21	7.8	16	4.3	3.1	2.0
10	73	8.1	8.8	70	8.8	28	18	9.5	7.0	104	2.7	1.9
11	25	7.3	7.6	100	7.9	35	16	21	3.2	63	2.5	2.8
12	67	6.7	6.7	150	7.1	59	15	28	4.3	32	2.7	2.1
13	28	27	6.2	220	6.2	62	13	14	3.8	15	4.4	1.8
14	21	160	7.5	110	5.6	22	21	10	3.9	9.9	2.9	1.6
15	19	24	9.0	68	5.2	15	27	9.2	5.0	7.6	2.5	1.4
16	62	12	12	42	4.9	12	21	95	3.8	6.3	2.3	1.3
17	49	8.5	20	54	4.7	45	23	28	7.9	5.6	6.1	1.2
18	82	7.5	33	38	4.5	85	80	25	7.1	5.0	4.1	1.2
19	118	6.8	63	33	4.3	98	121	72	4.9	4.3	3.0	1.1
20	73	6.2	50	21	4.2	68	50	34	4.4	4.0	2.6	1.1
21	37	5.8	64	172	4.1	93	29	18	33	3.6	2.1	1.1
22	113	5.5	60	209	4.0	51	21	12	57	3.5	1.8	115
23	30	5.3	32	105	20	56	16	11	16	3.0	2.4	79
24	36	5.1	23	145	130	28	132	228	12	3.0	3.6	19
25	20	5.0	18	287	57	175	60	68	7.4	3.0	2.7	28
26	67	4.8	15	127	77	50	113	25	5.5	2.8	2.3	11
27	30	4.7	12	34	65	65	43	40	4.5	3.7	2.0	6.6
28	78	4.6	11	21	70	74	28	23	3.8	3.4	1.8	69
29	81	4.5	13	16	---	39	18	20	3.4	3.0	1.8	26
30	62	4.4	12	14	---	25	14	18	37	2.7	1.7	9.9
31	43	---	13	44	---	40	---	12	---	2.8	10	---
TOTAL	1449.4	588.8	611.1	2490.2	805.5	1905	1197	897.4	302.6	476.2	126.1	445.6
MEAN	46.8	19.6	19.7	80.3	28.8	61.5	39.9	28.9	10.1	15.4	4.07	14.9
MAX	118	160	64	287	130	175	132	228	57	104	12	115
MIN	5.8	4.4	4.2	7.6	4.0	12	13	6.7	3.4	2.7	1.7	1.1
CFSM	13.8	5.80	5.83	23.8	8.52	18.2	11.8	8.55	2.99	4.56	1.20	4.41
IN.	15.95	6.48	6.72	27.40	8.86	20.96	13.17	9.87	3.33	5.24	1.39	4.90
AC-FT	2870	1170	1210	4940	1600	3780	2370	1780	600	945	250	884

CAL YR 1985 TOTAL 10933.8 MEAN 30.0 MAX 320 MIN 1.4 CFSM 8.88 IN 120.30 AC-FT 21690
WTR YR 1986 TOTAL 11294.9 MEAN 30.9 MAX 287 MIN 1.1 CFSM 9.14 IN 124.27 AC-FT 22400

15083500 PERKINS CREEK NEAR METLAKATLA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1976 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: August 1976 to August 1979 and February 1980 to July 1981, November 1981 to January 1982, and September 1982 to current year.

INSTRUMENTATION.--Water temperature recorder since Aug. 6, 1976. Digital water-temperature recorder set for one-hour-interval punches.

REMARKS.--Monitor battery failure Mar. 1-17. Recorder failure Apr. 2 to June 17. Records represent water temperature at sensor within 0.5°c and are good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 18.0°C, Aug. 14, 15, and 20, 1977; minimum recorded, 0.0°C on many days during winter periods, in most years.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 15.5°C, July 20 and Aug. 9, 10; minimum recorded, 0.0°C, Nov. 27-29, Dec. 3-14, Feb. 13-15 and 22-23.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
SEP									
12...	1600	2.1	48	6.30	14.5	11.0	10	0	3.1

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
SEP								
12...	0.59	3.8	0.70	10	10	12	4.9	5.3

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)
SEP								
12...	0.40	5.3	31	0.420	0.560	0.44	1.0	0.110

15083500 PERKINS CREEK NEAR METLAKATLA--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.5	9.0	4.5	3.5	.5	.5	2.0	1.5	4.5	4.0	---	---
2	9.5	9.0	3.5	3.0	.5	.5	1.5	1.5	4.5	4.0	---	---
3	9.0	8.0	3.5	3.0	.5	.0	1.5	1.5	4.0	3.0	---	---
4	9.0	7.5	3.0	3.0	.5	.0	2.0	1.5	3.5	3.5	---	---
5	8.5	7.5	3.0	2.5	.0	.0	2.0	2.0	4.0	3.0	---	---
6	7.5	6.5	3.0	2.5	.0	.0	2.0	2.0	3.0	2.5	---	---
7	7.5	6.0	3.5	3.0	.0	.0	2.5	2.0	2.0	1.5	---	---
8	6.5	5.5	3.0	1.5	.0	.0	2.5	2.0	2.5	2.0	---	---
9	8.5	6.5	1.5	.5	.0	.0	3.5	2.5	2.5	2.0	---	---
10	8.0	7.5	1.0	.5	.0	.0	3.5	2.5	2.0	1.5	---	---
11	7.5	7.0	1.0	1.0	.0	.0	3.5	2.5	1.5	1.0	---	---
12	8.0	6.5	1.5	1.0	.0	.0	4.5	3.5	1.0	.5	---	---
13	8.0	8.0	2.5	2.0	.0	.0	4.5	4.0	.5	.0	---	---
14	8.0	7.5	3.0	2.0	.5	.0	4.5	3.5	.5	.0	---	---
15	7.5	6.5	3.0	2.0	1.0	.5	3.5	3.0	.5	.0	---	---
16	7.5	6.5	2.5	1.5	1.0	1.0	3.0	3.0	.5	.5	---	---
17	7.5	6.5	1.0	.5	2.0	1.0	3.5	3.0	.5	.5	---	---
18	7.0	6.5	.5	.5	2.5	1.5	3.5	3.5	.5	.5	5.0	4.5
19	6.5	6.0	.5	.5	2.5	2.0	3.5	3.0	.5	.5	5.5	4.5
20	6.5	6.0	.5	.5	3.0	2.5	3.0	2.5	.5	.5	6.0	5.5
21	6.5	6.0	.5	.5	3.0	2.5	3.0	2.5	.5	.5	5.0	4.5
22	6.5	6.0	.5	.5	3.0	2.5	3.0	2.5	.5	.0	4.5	4.5
23	6.0	5.5	.5	.5	3.5	3.0	3.5	3.0	1.0	.0	5.5	4.5
24	5.5	4.5	.5	.5	3.5	3.0	3.0	3.0	2.0	1.0	5.5	5.0
25	5.0	4.5	.5	.5	3.5	2.5	4.0	3.0	3.0	1.0	5.0	4.0
26	4.5	4.0	.5	.5	2.5	1.5	4.5	4.0	3.5	2.5	6.0	4.5
27	4.0	3.5	.5	.0	1.5	1.0	4.5	4.0	3.0	2.5	5.0	4.5
28	4.0	3.5	.0	.0	1.5	1.5	4.0	3.0	3.0	2.0	5.0	4.0
29	4.5	4.0	.5	.0	1.5	1.5	3.0	2.0	---	---	5.0	4.0
30	4.5	4.0	.5	.5	2.0	1.5	3.5	2.0	---	---	4.5	4.0
31	4.5	4.5	---	---	2.0	2.0	4.0	3.5	---	---	4.0	3.5
MONTH	9.5	3.5	4.5	.0	3.5	.0	4.5	1.5	4.5	.0	6.0	3.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	5.0	3.5			---	---	11.0	10.5	13.0	12.0	13.0	12.0
2	---	---			---	---	11.0	10.0	13.5	12.5	13.0	12.5
3	---	---			---	---	10.5	9.5	13.5	13.0	12.5	12.0
4	---	---			---	---	11.0	10.0	13.5	13.0	12.0	11.0
5	---	---			---	---	12.5	10.5	14.0	13.0	12.5	11.0
6	---	---			---	---	12.0	11.5	14.5	13.0	12.5	11.0
7	---	---			---	---	11.5	11.0	14.5	13.5	12.5	10.5
8	---	---			---	---	12.0	11.0	14.5	12.5	12.0	10.5
9	---	---			---	---	12.0	11.5	15.5	12.5	12.5	11.0
10	---	---			---	---	11.5	11.0	15.5	13.5	11.5	10.0
11	---	---			---	---	11.5	10.5	15.0	14.5	11.5	10.5
12	---	---			---	---	11.5	11.0	14.5	14.0	11.0	9.0
13	---	---			---	---	11.5	11.0	15.0	13.5	10.5	8.5
14	---	---			---	---	11.5	11.0	13.5	12.5	10.0	8.0
15	---	---			---	---	12.0	11.0	13.0	11.5	10.0	8.0
16	---	---			---	---	13.5	11.5	12.0	11.5	9.5	7.5
17	---	---			---	---	13.0	12.0	12.5	11.5	9.5	7.5
18	---	---			11.5	---	14.0	11.5	12.5	11.0	9.0	7.0
19	---	---			12.0	10.5	15.0	12.0	12.5	10.5	9.0	7.0
20	---	---			11.0	10.0	15.5	13.0	13.0	11.5	9.5	7.5
21	---	---			11.0	10.0	14.5	13.5	13.0	10.5	11.5	8.0
22	---	---			11.0	10.5	14.5	13.0	13.0	11.0	11.5	11.0
23	---	---			10.5	10.0	15.0	13.0	12.5	12.0	11.0	10.0
24	---	---			10.0	9.0	14.0	13.0	13.0	12.0	10.5	10.0
25	---	---			10.5	9.0	14.0	13.0	13.0	11.5	10.5	8.5
26	---	---			12.0	9.0	13.0	12.0	13.0	11.5	9.5	8.0
27	---	---			13.5	10.5	12.5	12.0	13.5	11.5	9.5	8.0
28	---	---			14.0	11.5	12.5	11.5	13.5	12.5	10.0	9.5
29	---	---			13.0	12.0	12.5	11.0	13.5	12.5	10.5	9.5
30	---	---			12.5	11.0	12.0	10.5	12.5	11.0	10.5	9.5
31	---	---			---	---	12.5	12.0	12.5	12.0	---	---
MONTH					14.0		15.5	9.5	15.5	10.5	13.0	7.0
YEAR	15.5	.0										

15085100 OLD TOM CREEK NEAR KASAAN

LOCATION.--Lat 55°23'44", long 132°24'25", in NW¼SW¼ sec.6, T.75 S., R.86 E., Hydrologic Unit 19060000, on Prince of Wales Island, in Tongass National Forest, on left bank 1,000 ft upstream from mouth at Skowl Arm of Kasaan Bay, 0.4 mi downstream from unnamed tributary, and 10 mi south of Kasaan.

DRAINAGE AREA.--5.90 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1949 to current year.

REVISED RECORDS.--WDR AK-85-1: 1950-1984 (P).

GAGE.--Water-stage recorder. Elevation of gage is 10 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 19 to Dec. 7 and Feb. 13-26. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--37 years, 38.9 ft^3/s, 89.54 in/yr, 28,180 acre-ft/year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,490 ft^3/s, Apr. 16, 1952, gage height, 6.96 ft, from rating curve extended above 230 ft^3/s; minimum recorded, 0.16 ft^3/s, Nov. 15, 1965, gage height, 1.10 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 450 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Jan. 9	0900	509	4.51	Jan. 25	1200	*880	*5.54
Jan. 13	0745	663	4.98				

Minimum discharge, 1.7 ft^3/s, Sept. 18, gage height, 1.43 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12	31	6.4	12	179	224	25	22	20	28	5.0	2.8
2	28	34	6.2	9.8	89	81	27	20	17	40	6.5	2.7
3	17	35	6.0	8.3	38	167	43	19	15	27	7.7	2.6
4	30	28	9.0	8.0	27	70	47	17	14	18	6.6	2.6
5	20	25	43	7.8	24	50	34	16	14	14	6.5	2.6
6	14	29	30	29	18	64	27	15	13	11	6.0	2.5
7	12	38	20	86	15	93	80	14	13	9.5	5.7	2.4
8	10	32	15	44	12	172	53	14	13	8.9	5.2	2.4
9	27	22	11	299	11	79	34	15	16	8.7	5.0	2.3
10	36	18	8.7	71	10	60	26	15	15	13	4.7	2.3
11	23	16	7.6	110	8.7	48	22	15	13	15	4.5	2.4
12	40	15	6.7	194	7.6	55	19	20	11	23	4.5	2.3
13	42	74	6.6	285	6.7	79	18	17	10	20	4.3	2.1
14	28	253	8.3	179	6.0	42	17	16	10	14	4.1	2.0
15	21	70	9.2	74	5.4	30	17	14	10	11	3.9	2.1
16	34	43	13	39	4.9	24	19	30	9.9	10	3.7	2.0
17	48	32	18	31	4.5	22	20	25	10	9.0	4.1	1.9
18	54	26	32	30	4.1	36	30	20	12	8.3	4.0	1.8
19	87	23	65	28	3.8	122	76	50	10	7.6	3.6	1.9
20	92	19	49	24	3.6	159	50	40	9.7	7.3	3.5	2.0
21	69	16	66	55	3.5	191	37	27	14	6.8	3.3	1.9
22	91	14	63	113	3.4	100	29	23	23	6.6	3.1	2.9
23	51	12	33	71	3.9	93	24	19	21	6.3	3.1	5.2
24	40	11	25	83	55	52	63	61	20	6.0	3.1	4.5
25	28	10	19	656	60	132	48	74	15	5.7	3.1	7.6
26	39	9.1	15	366	100	72	169	64	12	5.5	3.0	5.8
27	38	8.3	12	80	217	62	98	105	10	5.5	2.8	4.6
28	58	7.7	11	38	162	99	46	50	9.1	5.5	2.8	14
29	138	7.2	13	25	---	55	31	37	8.3	5.2	2.8	14
30	75	6.8	12	19	---	37	26	29	8.4	5.0	2.6	7.1
31	46	---	13	32	---	28	---	24	---	5.0	2.6	---
TOTAL	1348	965.1	652.7	3106.9	1083.1	2598	1255	927	396.4	366.4	131.4	113.3
MEAN	43.5	32.2	21.1	100	38.7	33.8	41.8	29.9	13.2	11.8	4.24	3.78
MAX	138	253	66	656	217	224	169	105	23	40	7.7	14
MIN	10	6.8	6.0	7.8	3.4	22	17	14	8.3	5.0	2.6	1.8
CFSM	7.37	5.46	3.58	16.9	6.56	14.2	7.09	5.07	2.24	2.00	.72	.64
IN.	8.50	6.08	4.11	19.59	6.83	16.38	7.91	5.84	2.50	2.31	.83	.71
AC-FT	2670	1910	1290	6160	2150	5150	2490	1840	786	727	261	225

CAL YR 1985 TOTAL 12420.5 MEAN 34.0 MAX 335 MIN 4.5 CFSM 5.76 IN 78.30 AC-FT 24640
WTR YR 1986 TOTAL 12943.3 MEAN 35.5 MAX 656 MIN 1.8 CFSM 6.02 IN 81.59 AC-FT 25670

15085100 OLD TOM CREEK NEAR KASAAN--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1956, 1959, and 1965 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1964, April 1965 to February 1975, June 1975 to April 1978, and November 1978 to current year.

INSTRUMENTATION.--Water temperature recorder since Oct. 1964. Digital water-temperature recorder set for one-hour-interval punches.

REMARKS.--Recorder clock stopped July 25 TO Sept. 12. Records represent water-temperature at the sensor within 0.5°c and are good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 17.5°C, Aug. 12, 14-18, 1977; minimum recorded, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 16.5°C, July 20; minimum recorded, 0.0°C, Feb. 13-19 and 23-26.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)
SEP									
12...	1800	2.2	83	6.60	12.5	11.0	31	1	11

DATE	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)
SEP								
12...	0.88	1.9	0.80	29	30	37	5.6	2.3

DATE	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC DISSOLVED (MG/L AS N) (00607)	NITROGEN,AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)
SEP								
12...	<0.10	2.8	44	0.880	0.470	0.73	1.2	0.110

15085100 OLD TOM CREEK NEAR KASAAN--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	9.5	9.0	5.0	4.0	.5	.5	2.0	1.5	3.0	2.5	2.0	1.5
2	9.0	8.5	4.0	3.5	.5	.5	1.5	1.0	3.0	2.5	2.0	1.5
3	8.5	8.0	4.0	2.5	.5	.5	1.5	1.0	3.0	2.5	2.5	2.0
4	9.0	8.5	3.5	3.0	.5	.5	2.0	1.5	3.0	2.5	3.0	2.0
5	9.0	8.0	3.5	2.5	.5	.5	2.0	1.5	3.0	2.5	2.5	2.5
6	8.0	7.0	3.5	3.0	.5	.5	2.0	1.5	2.5	2.0	3.0	2.5
7	8.0	6.5	4.0	3.5	.5	.5	2.5	1.5	2.0	2.0	3.0	3.0
8	7.0	6.0	3.5	2.0	.5	.5	2.0	2.0	2.0	1.5	3.0	2.5
9	8.0	7.0	2.0	1.0	.5	.5	2.5	2.0	2.0	2.0	3.0	2.5
10	8.0	7.5	1.5	1.0	.5	.5	2.5	2.0	2.0	1.0	3.0	2.5
11	8.0	7.5	1.5	1.5	1.0	.5	3.0	2.0	1.0	.5	3.5	3.0
12	8.0	7.0	2.5	1.5	1.0	1.0	3.0	2.5	.5	.5	3.5	3.0
13	8.5	8.0	2.5	1.5	1.5	1.0	3.5	3.0	.5	.0	3.5	3.0
14	8.5	8.0	3.0	2.0	1.5	1.0	3.0	2.5	.5	.0	4.0	3.0
15	8.0	7.0	3.0	3.0	1.5	1.0	2.5	2.0	.5	.0	3.0	2.5
16	7.0	6.5	3.0	1.5	1.5	1.5	2.0	1.5	.0	.0	3.0	2.0
17	7.0	7.0	1.5	1.0	2.0	1.5	2.0	2.0	.0	.0	4.0	3.0
18	7.0	6.5	1.0	.5	2.0	1.5	2.0	2.0	.0	.0	4.0	3.0
19	7.0	6.5	.5	.5	2.5	1.5	2.0	1.5	.5	.0	4.0	3.0
20	6.5	6.5	.5	.5	2.5	2.5	1.5	1.0	.5	.5	4.5	3.5
21	6.5	6.5	.5	.5	3.0	2.0	1.5	1.0	.5	.5	4.0	3.5
22	6.5	6.5	.5	.5	2.5	2.5	2.0	1.5	.5	.5	4.0	3.5
23	6.5	6.0	.5	.5	2.5	2.5	2.5	2.0	.5	.0	4.5	3.0
24	6.0	5.5	.5	.5	2.5	2.0	2.0	1.5	.0	.0	4.5	3.5
25	5.5	5.0	.5	.5	2.5	2.0	2.5	2.0	.0	.0	4.0	3.5
26	5.5	5.0	.5	.5	2.0	1.5	3.0	2.5	.5	.0	4.5	3.5
27	5.0	5.0	.5	.5	1.5	1.0	2.5	2.5	2.0	.5	4.5	3.5
28	4.5	4.0	.5	.5	1.5	1.5	2.5	2.0	2.0	1.5	4.0	3.5
29	5.0	4.5	.5	.5	1.5	1.5	2.0	1.5	---	---	4.5	3.0
30	5.5	5.0	.5	.5	2.0	1.5	2.0	1.5	---	---	3.5	3.0
31	5.0	4.5	---	---	2.0	2.0	2.5	2.0	---	---	3.5	2.5
MONTH	9.5	4.0	5.0	.5	3.0	.5	3.5	1.0	3.0	.0	4.5	1.5

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	4.5	3.0	6.5	4.0	8.5	7.0	11.0	10.0			---	---
2	3.5	3.0	7.5	5.0	9.0	7.5	10.0	9.5			---	---
3	4.0	3.0	6.5	5.0	11.0	7.0	11.0	9.5			---	---
4	4.5	3.5	6.5	4.5	12.0	8.0	13.0	10.5			---	---
5	5.0	4.0	7.5	4.5	13.0	9.0	14.0	10.5			---	---
6	4.5	4.0	6.0	5.0	12.0	10.0	13.0	11.5			---	---
7	4.5	4.0	6.5	5.0	11.5	10.0	12.0	11.0			---	---
8	3.5	2.5	7.0	5.0	10.0	9.5	12.5	11.5			---	---
9	3.0	1.5	5.5	4.5	11.0	9.0	13.0	11.5			---	---
10	3.5	0	6.5	4.0	9.5	8.5	12.5	11.0			---	---
11	4.0	2.5	6.5	5.0	9.5	7.5	11.5	11.0			---	---
12	3.5	1.5	5.0	4.0	11.5	7.5	11.5	11.0			---	---
13	3.0	2.0	5.5	3.5	11.5	9.0	11.5	10.5			10.5	9.0
14	4.0	2.5	5.5	4.0	11.5	10.5	11.0	10.5			10.5	8.5
15	5.0	3.0	7.0	4.5	11.5	10.0	12.0	11.0			10.0	8.0
16	4.5	3.0	6.0	5.0	12.5	9.5	14.5	11.0			10.0	8.0
17	4.5	3.0	7.0	5.0	10.5	10.0	13.0	11.5			9.5	7.5
18	3.5	3.0	6.5	5.5	10.5	10.0	15.0	11.5			9.5	7.5
19	5.0	3.0	6.5	5.5	11.0	9.5	16.0	12.0			9.5	7.5
20	5.0	4.0	7.5	5.5	11.5	9.5	16.5	12.5			9.5	8.0
21	5.0	3.5	7.0	5.5	11.0	10.0	13.5	13.0			10.5	8.5
22	5.0	3.5	7.0	5.5	11.0	9.5	14.0	12.5			10.5	10.0
23	5.0	3.0	7.0	5.5	10.0	9.0	16.0	12.5			11.0	10.0
24	4.0	3.5	7.0	6.5	11.0	8.5	13.5	12.5			10.0	9.5
25	5.5	3.5	8.0	6.5	10.5	9.0	---	---			10.0	9.5
26	4.5	4.0	8.0	7.0	13.0	9.0	---	---			10.0	9.0
27	5.5	4.0	8.0	7.0	14.0	10.0	---	---			9.5	8.5
28	5.5	4.0	8.5	7.0	14.5	11.0	---	---			9.5	9.0
29	5.0	3.5	8.5	7.5	13.0	11.5	---	---			10.0	9.5
30	6.5	3.5	8.0	7.0	11.5	11.0	---	---			11.0	10.0
31	---	---	9.5	7.5	---	---	---	---			---	---
MONTH	6.5	1.5	9.5	3.5	14.5	7.0	16.5	9.5				7.5
YEAR	16.5	.0										

15087545 MUNICIPAL WATERSHED CREEK NEAR PETERSBURG

LOCATION.--Lat 56°46'40", long 132°55'07", in NW¼NE¼ sec.11, T.59 S., R.79 E., Hydrologic Unit 19060000, on Mitkof Island, in Tongass National Forest, on left bank 0.5 mi upstream from the Petersburg reservoir, 2.2 mi upstream from mouth, and 2.3 mi southeast of Petersburg.

DRAINAGE AREA.--2.20 mi^2.

PERIOD OF RECORD.--October 1978 to current year.

REVISED RECORDS.--WDR AK-83-1: 1979-80 (M).

GAGE.--Water-stage recorder. Elevation of gage is 400 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Jan. 14, 1985 at same site, datum approximately 3.7 ft higher.

REMARKS.--Estimated daily discharges: Oct. 12-21, Nov. 8-11, Nov. 15 to Jan. 14, Jan. 30, Feb. 7, 10-26, Mar. 14, 15, and Apr. 9-13. Records good except for those above 100 ft^3/s which are fair, and estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--8 years, 21.6 ft^3/s, 133.33 in/yr, 15,650 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,080 ft^3/s, Oct. 4, 1986, gage height, 7.82 ft, from rating curve extended above 160 ft^3/s; minimum daily, 0.60 ft^3/s, Aug. 24-28, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 430 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 1	2115	476	7.14	Oct. 4	0530	*1,080	*7.82

Note: Discharge may have been higher during period of no gage-height record, Nov. 16 to Jan. 14.

Minimum discharge, 0.89 ft^3/s, Sept. 18-21, gage height, 4.80 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	85	6.7	1.0	3.5	15	28	4.1	13	17	25	12	16
2	37	4.9	1.0	2.8	20	12	4.0	14	19	17	22	5.9
3	8.7	4.3	1.0	2.3	7.0	73	19	15	19	7.2	19	4.2
4	152	3.8	2.5	2.0	4.4	79	16	15	25	6.8	15	3.1
5	12	3.5	7.0	1.8	3.5	11	48	13	29	5.4	18	2.4
6	5.9	3.3	4.8	10	2.9	8.5	16	13	26	4.9	48	2.0
7	4.2	4.0	3.9	40	2.6	17	49	19	49	4.0	8.5	1.7
8	5.9	3.5	2.9	13	2.4	56	16	25	23	3.5	4.8	1.5
9	50	3.1	2.4	43	2.3	28	7.2	14	29	6.8	3.4	2.3
10	76	2.9	2.0	20	2.1	11	5.0	8.7	16	5.7	2.8	3.5
11	17	2.8	1.8	13	2.0	8.6	3.9	13	12	5.5	7.8	2.2
12	12	2.7	1.6	35	1.9	9.7	3.4	17	12	16	18	1.7
13	9.0	55	1.5	80	1.8	8.2	3.0	8.2	16	11	27	1.5
14	7.0	33	1.8	65	1.7	7.0	2.7	12	21	6.0	5.8	1.3
15	6.0	4.1	2.1	15	1.7	6.4	3.1	15	30	6.6	3.7	1.2
16	11	2.2	15	5.5	1.6	6.1	5.8	72	18	4.5	12	1.1
17	16	1.8	120	5.0	1.5	8.3	9.8	31	22	3.6	22	1.0
18	32	1.5	105	4.3	1.5	14	7.5	19	38	3.0	7.0	.92
19	17	1.4	40	3.7	1.4	64	77	39	16	2.6	4.6	.89
20	9.0	1.3	41	3.4	1.4	115	26	30	15	2.2	3.4	.89
21	4.5	1.2	39	2.9	1.3	66	11	25	40	2.0	2.7	2.9
22	13	1.2	29	5.1	1.3	24	8.3	18	64	2.4	2.3	184
23	13	1.2	12	6.6	10	27	6.3	14	62	3.6	44	118
24	11	1.1	6.0	8.5	135	11	5.8	22	20	6.1	25	12
25	7.3	1.1	4.4	98	80	11	5.2	39	12	6.5	8.8	16
26	7.6	1.1	3.5	70	100	27	7.1	81	10	12	4.9	8.1
27	5.6	1.1	3.0	25	83	26	12	49	13	19	3.6	4.9
28	5.4	1.0	2.6	7.1	65	35	7.6	28	11	7.9	15	4.2
29	81	1.0	4.0	5.2	---	14	9.1	36	7.9	4.5	12	3.5
30	24	1.0	3.5	4.1	---	9.1	12	29	7.9	3.4	4.9	3.0
31	12	---	5.2	5.3	---	5.2	---	23	---	2.8	20	---
TOTAL	757.1	156.8	470.5	606.1	554.3	826.1	410.9	769.9	699.8	217.5	408.0	411.90
MEAN	24.4	5.23	15.2	19.6	19.8	26.6	13.7	24.8	23.3	7.02	13.2	13.7
MAX	152	55	120	98	135	115	77	81	64	25	48	184
MIN	4.2	1.0	1.0	1.8	1.3	5.2	2.7	8.2	7.9	2.0	2.3	.89
CFSM	11.1	2.38	6.91	8.91	9.00	12.1	6.23	11.3	10.6	3.19	6.00	6.23
IN.	12.80	2.65	7.95	10.24	9.37	13.96	6.94	13.01	11.83	3.68	6.90	6.96
AC-FT	1500	311	933	1200	1100	1640	815	1530	1390	431	809	817

CAL YR 1985 TOTAL 8931.90 MEAN 24.5 MAX 229 MIN 1.0 CFSM 11.1 IN 150.96 AC-FT 17720
WTR YR 1986 TOTAL 6288.90 MEAN 17.2 MAX 184 MIN .89 CFSM 7.82 IN 106.29 AC-FT 12470

15087570 HAMILTON CREEK NEAR KAKE

LOCATION.--Lat 56°52'21", long 133°40'30", in SE¼NE¼ sec.1, T.58 S., R.74 E., Hydrologic Unit 19060000, on Kupreanof Island, in Tongass National Forest, 2.9 mi upstream from mouth at Hamilton Bay and 9.5 mi southeast of Kake.

DRAINAGE AREA.--65.0 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximums, water years 1972-73 and 1975-76. October 1976 to September 1986 (discontinued).

REVISED RECORDS.--WDR AK-79-1: 1976 (M). WDR AK-80-1: 1977 (M) and 1978 (M).

GAGE.--Water-stage recorder. Elevation of gage is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to October 1976, crest-stage gage at same datum and different site.

REMARKS.--Estimated daily discharges: Nov. 8-13, Nov. 17 to Dec. 5, Dec. 9-21, 27-30, and Feb. 7-25. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--10 years, 351 ft³/s, 73.33 in/yr, 254,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 ft³/s, Jan. 30, 1976, gage height, 14.97 ft, from floodmarks, from rating curve extended above 780 ft³/s on basis of slope-area measurement at gage height 13.36 ft; maximum gage height, 15.40 ft, Dec. 18, 1985 (backwater from ice); minimum discharge, 9.5 ft³/s, July 7, 1982, gage height, 6.55 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 4,400 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Nov. 14	0315	5,420	12.37	Jan. 7	1800	6,880	12.99
Dec. 18	0630	(a)	*15.40	Jan. 25	0700	5,420	12.37
Dec. 22	0200	*9,610	13.86				

a Backwater from ice, discharge may have exceeded that of Dec. 22, 1986.

Minimum discharge, 15 ft³/s, Sept. 21, gage height, 6.64 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	315	237	32	1710	284	1100	119	106	151	67	50	357
2	1110	148	32	753	583	755	96	83	127	222	215	167
3	266	125	32	490	264	1820	330	69	139	125	265	106
4	1670	111	60	406	145	1710	356	60	93	73	192	74
5	437	94	700	292	106	402	485	56	69	53	194	55
6	167	81	1880	195	67	183	378	48	54	41	380	44
7	101	107	743	4830	54	218	898	42	60	35	186	38
8	75	90	348	3040	46	1550	640	73	90	31	96	32
9	170	67	140	2400	42	968	237	78	305	30	60	35
10	613	62	80	986	40	554	148	67	186	30	44	47
11	423	59	82	671	54	300	119	61	127	30	66	38
12	268	58	88	1900	44	325	101	284	78	36	200	31
13	311	300	80	1750	39	244	84	193	57	130	382	27
14	261	2800	120	969	35	193	80	163	44	94	169	23
15	174	391	280	661	32	160	80	157	82	82	80	22
16	156	171	600	248	29	124	91	241	200	66	69	20
17	410	100	2000	163	27	114	151	374	248	49	403	18
18	605	78	8600	163	25	218	260	176	240	41	418	17
19	491	66	7780	130	24	808	830	327	374	34	167	16
20	239	58	4430	186	22	2540	814	565	260	28	90	16
21	144	53	3380	200	21	1270	487	383	186	25	60	17
22	200	49	6740	402	20	485	397	308	429	27	44	1240
23	297	46	3420	383	20	522	272	207	439	25	232	2060
24	344	43	1840	572	50	280	284	130	288	29	485	558
25	322	41	1650	4130	1700	214	180	142	173	56	287	404
26	218	39	747	2810	2600	252	136	373	96	53	126	313
27	324	37	650	894	2420	374	211	1370	65	233	74	148
28	250	36	1100	292	1880	813	163	571	50	297	247	96
29	2220	34	900	154	---	440	123	272	40	119	922	71
30	1150	33	2000	122	---	284	130	207	35	71	204	58
31	498	---	2210	133	---	170	---	197	---	50	124	---
TOTAL	14229	5614	52744	32035	10673	19390	8680	7883	4785	2282	6531	6148
MEAN	459	187	1701	1033	381	625	289	254	160	73.6	211	205
MAX	2220	2800	8600	4830	2600	2540	898	1870	439	297	922	2060
MIN	75	33	32	122	20	114	80	42	35	25	44	16
CFSM	7.06	2.88	26.2	15.9	5.86	9.62	4.45	3.91	2.46	1.13	3.25	3.15
IN.	8.14	3.21	30.19	18.33	6.11	11.10	4.97	4.51	2.74	1.31	3.74	3.52
AC-FT	28220	11140	104600	63540	21170	38460	17220	15640	9490	4530	12950	12190

CAL YR 1985 TOTAL 186905 MEAN 512 MAX 8600 MIN 23 CFSM 7.88 IN 106.97 AC-FT 370700
WTR YR 1986 TOTAL 170994 MEAN 468 MAX 8600 MIN 16 CFSM 7.20 IN 97.86 AC-FT 339200

15087570 HAMILTON CREEK NEAR KAKE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 7-13, 1981 and December 3, 1981 to December 16, 1985 (discontinued).

INSTRUMENTATION.--Water temperature recorder since Oct. 7, 1981. Digital water-temperature recorder set for one-hour-interval punches.

REMARKS.--Battery dead Oct. 1-23. Records represent water temperature at sensor within 0.5°c and are poor.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 22.5°C, June 25 and 28, 1982; minimum recorded, 0.0°C, during many winter days.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 4.0°C, Oct. 24-25; minimum recorded 0.0°C Nov. 2 to Dec. 16.

TEMPERATURE, WATER (DEG. C), OCTOBER TO DECEMBER 1985

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	2.5	1.5	.0	.0						
2	---	---	2.0	.0	.0	.0						
3	---	---	1.0	.0	.0	.0						
4	---	---	1.0	.0	.0	.0						
5	---	---	.5	.0	.0	.0						
6	---	---	.5	.0	.0	.0						
7	---	---	1.5	.0	.0	.0						
8	---	---	.0	.0	.0	.0						
9	---	---	.0	.0	.0	.0						
10	---	---	.0	.0	.0	.0						
11	---	---	.0	.0	.0	.0						
12	---	---	.0	.0	.0	.0						
13	---	---	.0	.0	.0	.0						
14	---	---	.5	.0	.0	.0						
15	---	---	.5	.0	.0	.0						
16	---	---	.0	.0	.0	.0						
17	---	---	.0	.0	---	---						
18	---	---	.0	.0	---	---						
19	---	---	.0	.0	---	---						
20	---	---	.0	.0	---	---						
21	---	---	.0	.0	---	---						
22	---	---	.0	.0	---	---						
23	---	---	.0	.0	---	---						
24	4.0	3.5	.0	.0	---	---						
25	4.0	3.0	.0	.0	---	---						
26	3.5	2.5	.0	.0	---	---						
27	2.5	2.0	.0	.0	---	---						
28	2.0	1.0	.0	.0	---	---						
29	3.0	2.0	.0	.0	---	---						
30	3.0	2.0	.0	.0	---	---						
31	3.0	2.0	---	---	---	---						
MONTH		1.0	2.5	.0	.0	.0						

15087590 ROCKY PASS CREEK NEAR POINT BAKER

LOCATION.--Lat 56°37'10", long 133°44'10", in SW¼SE¼ sec.34, T.60 S., R.74 E., Hydrologic Unit 19060000, on Kuiu Island, in Tongass National Forest, on left bank 0.5 mi upstream from mouth and 22 mi northwest of Point Baker.

DRAINAGE AREA.--2.72 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1976 to current year.

REVISED RECORDS.--WDR AK-79-1: 1977-78 (M). WDR AK-82-1: 1979-80. WDR AK-83-1: Drainage area.

GAGE.-Water-stage recorder. Elevation of gage is 65 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 8-13, Nov. 16 to Dec. 15, Feb. 6, 7, and 16-25. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--10 years, 12.2 ft³/s, 60.91 in/yr, 8,840 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,190 ft³/s, Oct. 9, 1979, gage height, 6.15 ft, from rating curve extended above 150 ft³/s on basis of slope-area measurement of peak flow; minimum daily, 0.02 ft³/s, Nov. 27, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 230 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 1	2030	241	3.17	Nov. 14	0045	300	3.53
Oct. 4	0400	507	4.28	Dec. 17	1900	*536	*4.45

Minimum discharge, 0.14 ft³/s, Sept. 19-21, gage height, 0.67 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	60	6.7	.82	9.8	16	34	6.1	1.9	3.0	11	1.5	19
2	43	4.0	.80	4.0	13	14	5.3	1.5	2.8	7.8	2.1	5.0
3	9.1	4.1	.79	2.0	5.0	87	20	1.2	2.1	3.4	2.5	2.5
4	110	3.6	1.8	1.5	2.5	38	14	1.1	1.5	2.2	4.8	1.4
5	10	2.8	5.0	1.7	1.8	9.5	20	.95	1.1	1.5	6.0	.98
6	4.5	2.6	3.2	12	1.3	14	11	.84	.95	1.1	28	.74
7	2.8	10	2.0	41	1.1	23	44	.80	1.2	.96	6.5	.60
8	6.1	5.0	1.4	12	1.0	56	15	.84	3.5	.87	2.8	.53
9	56	3.0	1.3	44	.92	47	7.7	.83	22	.80	1.6	.60
10	39	2.4	1.2	19	.93	23	5.4	.81	6.2	.80	1.2	.56
11	25	2.2	1.4	13	1.3	12	4.7	2.7	3.5	.82	2.6	.49
12	16	2.1	1.3	31	.83	17	4.2	10	2.0	1.1	6.0	.42
13	16	78	1.2	46	.69	11	3.5	4.1	1.3	1.3	25	.45
14	13	81	8.0	44	.76	8.9	3.6	2.9	1.1	1.0	4.9	.37
15	5.3	9.0	55	22	.75	6.4	4.0	2.1	6.5	.93	2.3	.32
16	17	3.0	143	5.4	.66	4.2	4.1	12	5.1	.81	6.0	.25
17	20	2.1	226	8.4	.59	6.5	9.6	12	2.9	.72	23	.20
18	46	1.8	215	8.3	.56	20	17	4.9	2.6	.66	7.1	.20
19	16	1.6	80	7.8	.53	90	64	13	2.2	.57	3.2	.16
20	10	1.4	46	14	.50	135	22	17	2.2	.50	1.8	.14
21	4.5	1.3	55	15	.48	42	13	5.9	3.7	.47	1.3	.26
22	19	1.2	52	26	.46	43	11	3.3	18	.61	1.1	84
23	8.7	1.1	16	28	.45	30	9.9	2.0	19	.56	6.7	111
24	25	1.1	11	29	3.0	14	14	2.3	8.2	.56	7.6	22
25	12	1.0	11	134	50	14	8.0	13	3.3	.67	4.4	16
26	15	.95	4.4	70	77	18	5.1	23	1.9	.68	2.3	9.7
27	12	.92	7.2	20	66	20	4.7	33	1.3	2.2	1.5	4.5
28	19	.89	11	6.1	41	39	5.9	12	1.1	2.1	21	4.7
29	84	.86	9.4	3.0	---	32	3.6	9.7	.92	1.3	20	4.4
30	45	.84	15	2.0	---	19	2.6	9.1	1.0	.97	5.0	3.2
31	21	---	31	15	---	9.1	---	4.9	---	.82	20	---
TOTAL	790.0	236.56	1018.21	695.0	289.11	936.6	363.0	209.67	132.17	49.78	229.8	294.67
MEAN	25.5	7.89	32.8	22.4	10.3	30.2	12.1	6.76	4.41	1.61	7.41	9.82
MAX	110	81	226	134	77	135	64	33	22	11	28	111
MIN	2.8	.84	.79	1.5	.45	4.2	2.6	.80	.92	.47	1.1	.14
CFSM	9.38	2.90	12.1	8.24	3.79	11.1	4.45	2.49	1.62	.59	2.72	3.61
IN.	10.80	3.23	13.92	9.50	3.95	12.80	4.96	2.87	1.81	.68	3.14	4.03
AC-FT	1570	469	2020	1380	573	1860	720	416	262	99	456	584

CAL YR 1985 TOTAL 6470.83 MEAN 17.7 MAX 226 MIN .49 CFSM 6.51 IN 88.47 AC-FT 12830
WTR YR 1986 TOTAL 5244.57 MEAN 14.4 MAX 226 MIN .14 CFSM 5.29 IN 71.70 AC-FT 10400

15087590 ROCKY PASS CREEK NEAR POINT BAKER--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1977 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)
SEP									
06...	1635	0.75	23	5.90	17.0	11.0	6	5	1.3

DATE	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)
SEP								
06...	0.62	2.3	0.30	2	1.0	1.0	12	3.6

DATE	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC DIS-SOLVED (MG/L AS N) (00607)	NITRO-GEN,AM-MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)
SEP								
06...	< 1.1	5.6	26	< 0.100	0.060	1.2	1.3	0.030

15087690 INDIAN RIVER NEAR SITKA

LOCATION.--Lat 57°04'01", long 135°17'42", in SW¼SE¼ sec.30, T.55 S., R.64 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Baranof Island, in Tongass National Forest, 2 mi upstream from mouth, and 1 mi southeast of Sitka.

DRAINAGE AREA.--10.1 mi².

PERIOD OF RECORD.--August 1980 to current year.

REVISED RECORDS.--WDR-82-1: 1980-81.

GAGE.--Water-stage recorder. Elevation of gage is 125 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records fair.

AVERAGE DISCHARGE.--6 years, 97.6 ft³/s, 131.23 in/yr, 70,710 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,080 ft³/s, Aug. 25, 1984, gage height, 13.02 ft, from rating curve extended above 3,100 ft³/s; minimum, 14 ft³/s, Dec. 29 and 30, 1983.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft³/s amd maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 18	0345	*3,270	*11.36	No other peak greater than base discharge.			

Minimum daily discharge, 17 ft³/s, Dec. 1-3 and Feb. 22-23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	282	49	17	72	75	135	72	50	138	85	65	138
2	421	45	17	59	93	102	69	62	180	75	72	79
3	244	43	17	53	71	220	108	67	123	65	73	65
4	322	42	21	51	60	185	81	62	115	60	75	58
5	190	39	82	47	51	108	118	62	122	58	96	54
6	148	47	60	56	46	96	99	64	120	55	208	50
7	129	49	31	68	44	96	153	68	111	53	110	47
8	129	39	25	52	43	89	92	95	105	51	81	45
9	271	34	24	63	43	113	73	80	120	49	71	70
10	314	33	24	69	40	92	68	65	121	52	67	80
11	209	32	25	53	37	81	61	60	112	50	83	53
12	192	45	25	68	35	78	56	62	91	48	87	46
13	293	149	24	113	33	72	53	59	92	49	177	42
14	274	79	34	99	31	69	50	64	124	47	88	38
15	171	52	56	74	28	68	50	60	128	47	75	36
16	202	43	90	57	25	62	64	62	97	46	183	35
17	257	39	429	52	22	58	56	69	86	43	181	33
18	186	37	1320	50	22	56	51	61	78	41	123	33
19	142	35	343	54	19	179	65	60	71	42	93	32
20	114	33	307	49	19	443	73	60	69	41	79	31
21	98	32	212	43	19	209	64	60	76	40	71	40
22	87	30	292	42	17	159	60	60	139	54	65	63
23	83	28	162	43	17	131	53	60	173	86	73	120
24	82	27	226	50	56	106	47	83	147	134	91	63
25	72	24	168	255	160	96	44	123	101	117	70	46
26	64	21	104	254	190	101	46	128	88	151	61	40
27	55	20	83	141	268	115	51	120	88	171	57	37
28	50	20	86	90	304	165	46	102	88	107	65	36
29	90	19	95	75	---	119	46	108	81	84	63	36
30	64	18	86	67	---	99	47	101	77	73	56	38
31	57	---	89	63	---	79	---	94	---	68	113	---
TOTAL	5292	1203	4574	2382	1868	3781	2016	2331	3261	2142	2872	1584
MEAN	171	40.1	148	76.8	66.7	122	67.2	75.2	109	69.1	92.6	52.8
MAX	421	149	1320	255	304	443	153	128	180	171	208	138
MIN	50	18	17	42	17	56	44	50	69	40	56	31
CFSM	16.9	3.97	14.7	7.60	6.60	12.1	6.65	7.45	10.8	6.84	9.17	5.23
IN.	19.49	4.43	16.85	8.77	6.88	13.92	7.42	8.58	12.01	7.89	10.58	5.83
AC-FT	10500	2390	9070	4720	3710	7500	4000	4620	6470	4250	5700	3140

CAL YR 1985 TOTAL 44272 MEAN 121 MAX 1320 MIN 17 CFSM 12.0 IN 163.05 AC-FT 87810
WTR YR 1986 TOTAL 33306 MEAN 91.2 MAX 1320 MIN 17 CFSM 9.03 IN 122.66 AC-FT 66060

15090000 GREEN LAKE NEAR SITKA

LOCATION.--Lat 56°59'14", long 135°06'37", in SW¼NE¼ sec. 29, T.56 S., R.65 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Baranof Island, in Tongrass National Forest, 0.4 mi upstream from mouth at Silver Bay, and 9.4 mi southeast of Sitka.

DRAINAGE AREA.--28.8 mi^2.

PERIOD OF RECORD.--September 1915 to September 1925 (published as "Green Lake Outlet"); monthly discharges only published in WSP 1372. October 1983 to current year (month end reservoir contents and monthly discharges).

REVISED RECORDS.--WSP 1372: 1916, 1917, 1922 (monthly discharge). WRD AK-84-1: Drainage area.

GAGE.--Nonrecording remote lake-level indicator at Blue Lake powerhouse (6 mi northwest of gage). Datum (corrected) of lake-level indicator is at mean low water, which is about 5 ft lower than National Geodetic Vertical Datum of 1929. Totalizing MWH meters on the two turbines in Green Lake powerhouse. September 1915 to September 1925, recording gage at site of present day dam, elevation of gage was 220 ft above NGVD, by barometer; prior to Dec. 27, 1916 at datum 1.00 ft higher.

REMARKS.--Reservoir is formed by concrete arch dam located at the outlet of Green Lake, construction began in 1978 and was completed in 1982. Total and usable capacity below spillway crest elevation of 395 ft is 88,000 and 75,000 acre-ft, respectively. Reservoir is used for power. Discharge released through the turbines is computed from relation between discharge, head, and power generation; release flow empties directly into Silver Bay and is not returned to stream. Spill is computed froma theoretical relation between discharge and stage above the crest of the 100 ft wide spillway. Turbine and spillway ratings and reservoir capacity table furnished by City and Borough of Sitka in 1983. A corrected reservoir capacity table was furnished in April 1987.

COOPERATION.--Reservoir elevations and MWH power generation provided by City and Borough of Sitka.

AVERAGE DISCHARGE.--12 years (water years, 1916-25, 1985-86), 298 ft^3/s, 140.52 in/yr, 215,900 acre-ft/yr. Mean discharge for water years 1985-86 adjusted for change in contents of Green Lake.

EXTREMES FOR CURRENT PERIOD.--Water year 1985: Maximum contents observed, 90,200 acre-ft, revised, Aug. 11, 12, Sept. 5, 16, 17, 24-26, elevation, 397.1 ft; minimum contents observed, 49,480 acre-ft, revised, May 13, 14, elevation, 350.6 ft. Maximum daily discharge, 1,270 ft^3/s, Aug. 11, 12; minimum daily release, 110 ft^3/s, July 21, 22.

Water year 1986: Maximum contents observed, 90,840 acre-ft, Oct. 2, 3, and 5, elevation, 397.7 ft; minimum contents observed, 36,820 acre-ft, May 23, elevation, 332.2 ft. Maximum daily discharge, 1,740 ft^3/s, Oct. 5; minimum daily release, 165 ft^3/s, July 10.

REVISIONS.--Revised month-end reservoir contents, change in month-end and yearly contents, and adjusted monthly mean disharges for water years 1984 and 1985 are given below.

MONTH END RESERVOIR ELEVATION, IN FEET, AND CONTENTS, IN ACRE FEET
OCTOBER 1983 TO SEPTEMBER 1984

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
OCT. 31	395 a	88000	---
NOV. 30	388.3 a	81640	- 6360
DEC. 31	378.2 a	72380	- 9260
JAN. 31	379.1	73190	+ 810
FEB. 29	380.7	74630	+ 1440
MAR. 31	379.5	73550	- 1080
APR. 30	370.6	65760	- 7790
MAY 31	369.8	65080	- 680
JUN. 30	371.7	66700	+ 1620
JUL. 31	371.8	66780	+ 80
AUG. 31	385.8	79260	+12480
SEP. 30	385.5	78980	- 280

a. Reservoir elevation on last day of month not provided.
Elevation estimated from adjacent readings.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1983 TO SEPTEMBER 1984
MEAN VALUES

MONTH	RELEASE	SPILL	TOTAL	ADJUSTED
OCT.	181	b	---	---
NOV.	211	b	---	---
DEC.	217	0	217	66
JAN.	191	0	191	204
FEB.	216	0	216	241
MAR.	218	0	218	200
APR.	272	0	272	141
MAY	298	0	298	287
JUN.	397	0	397	424
JUL.	419	0	419	420
AUG.	240	0	240	443
SEP.	260	0	260	255

b. Amount of spill unknown.

15090000 GREEN LAKE NEAR SITKA--Continued

MONTH END RESERVOIR ELEVATION, IN FEET, AND CONTENTS, IN ACRE FEET WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
OCT. 31	394.3	87340	+ 8360
NOV. 30	390.2	83440	- 3900
DEC. 31	383.9	77510	- 5930
JAN. 31	389.3	82590	+ 5080
FEB. 28	380.8	74720	- 7870
MAR. 31	363.9	60120	-14600
APR. 30	353.3	57640	- 8480
MAY 31	358.5	55800	+ 4160
JUN. 30	376.6	70940	+15140
JUL. 31	396.6	89680	+18740
AUG. 31	396.5	89580	- 100
SEP. 30	395.5	88530	- 1050
		CAL YR 1984	+ 5130
		WTR YR 1985	+ 9550

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1984 TO SEPTEMBER 1985 MEAN VALUES

MONTH	RELEASE	SPILL	TOTAL	ADJUSTED
OCT.	234	165	399	535
NOV.	197	0	197	131
DEC.	221	0	221	125
JAN.	231	0	231	313
FEB.	320	0	320	178
MAR.	345	0	345	108
APR.	280	0	280	137
MAY	242	0	242	310
JUN.	199	0	199	453
JUL.	203	127	330	635
AUG.	212	620	832	830
SEP.	167	469	636	618
CAL YR 1984	264	14	278	285
WTR YR 1985	238	115	353	366

MONTH END RESERVOIR ELEVATION, IN FEET, AND CONTENTS, IN ACRE FEET WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ELEVATION	CONTENTS	CHANGE IN CONTENTS
OCT. 31	392.3	85440	- 3090
NOV. 30	376.9	71210	-14230
DEC. 31	371.2	66270	- 4940
JAN. 31	364.7	60760	- 5510
FEB. 28	354.9	52920	- 7840
MAR. 31	349.6	48680	- 4240
APR. 30	336.8	39670	- 9010
MAY 31	336.5	39480	- 190
JUN. 30	347.0	46600	+ 7120
JUL. 31	362.1	58680	+12080
AUG. 31	371.8	66780	+ 8100
SEP. 30	367.5	63130	- 3650
		CAL YR 1985	-11240
		WTR YR 1986	-25400

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986 MEAN VALUES

MONTH	RELEASE	SPILL	TOTAL	ADJUSTED
OCT.	235	401	636	586
NOV.	314	0	314	75
DEC.	328	0	328	248
JAN.	293	0	293	203
FEB.	319	0	319	178
MAR.	299	0	299	230
APR.	306	0	306	155
MAY	271	0	271	268
JUN.	310	0	310	430
JUL.	249	0	249	446
AUG.	203	0	203	335
SEP.	267	0	267	206
CAL YR 1985	256	135	391	374
WTR YR 1986	283	33	316	280

15101500 GREENS CREEK NEAR JUNEAU

LOCATION.--Lat 58°05'18", long 134°44'49", in NW¼NW¼ sec.2, T.44 S., R.65 E., Hydrologic Unit 19060000, on Admiralty Island, in Tongass National Forest, on left bank 1 mi upstream from mouth at Hawk Inlet and 19 mi southwest of Juneau.

DRAINAGE AREA.--22.8 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1978 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 7-13, Nov. 15 to Dec. 16, Jan. 30, Feb. 6, 11-25, Mar. 6-9, Apr. 8-14 and 20-25. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--8 years, 98.8 ft^3/s, 58.85 in/yr, 71,580 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,640 ft^3/s, Oct. 30, 1978, gage height, 15.12 ft; minimum daily, 8.9 ft^3/s, Feb. 14, 1979.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Dec. 19	2130	*1,440	*14.03	Mar. 4	0100	1,230	13.83
Feb. 27	2300	898	13.41				

Minimum daily discharge, 15 ft^3/s, Nov. 29 to Dec. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	132	50	15	57	58	330	40	70	210	217	88	155
2	243	47	15	49	78	273	34	80	183	176	121	142
3	176	44	16	46	56	306	36	85	169	143	117	126
4	349	42	22	44	46	566	42	88	185	144	138	109
5	170	40	31	44	41	185	67	94	210	146	158	93
6	122	40	44	42	38	100	33	100	275	140	147	82
7	101	38	28	62	36	62	55	107	423	141	106	74
8	103	35	21	53	34	49	52	110	306	127	93	69
9	119	33	19	50	33	41	44	87	287	128	87	71
10	144	32	18	65	31	36	39	74	225	142	82	66
11	136	31	17	48	28	36	36	71	185	137	144	60
12	118	30	17	61	26	42	33	91	162	139	125	55
13	117	60	16	162	25	47	30	78	181	128	151	52
14	126	57	18	95	23	51	28	82	291	126	109	50
15	102	40	21	71	22	54	27	92	322	134	93	48
16	94	30	30	55	21	45	26	102	269	121	99	46
17	95	25	181	49	20	40	25	126	243	114	142	45
18	94	23	824	44	19	41	31	98	230	116	157	42
19	85	21	870	41	18	53	40	98	207	108	119	42
20	77	20	878	39	18	196	56	112	198	108	100	41
21	72	19	306	37	17	160	45	103	225	98	86	43
22	71	18	316	36	17	93	39	98	347	99	80	56
23	68	18	169	35	17	89	34	103	391	143	267	119
24	73	17	195	33	34	67	30	116	330	156	135	89
25	68	17	170	92	350	53	28	218	220	177	109	122
26	64	16	109	104	315	69	39	310	193	169	98	89
27	62	16	85	69	509	78	72	329	224	170	91	76
28	59	16	72	49	587	62	52	270	237	125	112	74
29	59	15	63	41	---	54	51	287	214	105	109	74
30	60	15	59	39	---	46	60	306	198	89	85	82
31	55	---	63	37	---	42	---	230	---	85	102	---
TOTAL	3414	905	4708	1749	2517	3366	1224	4215	7340	4151	3650	2292
MEAN	110	30.2	152	56.4	89.9	109	40.8	136	245	134	118	76.4
MAX	349	60	878	162	587	566	72	329	423	217	267	155
MIN	55	15	15	33	17	36	25	70	162	85	80	41
CFSM	4.83	1.33	6.67	2.47	3.94	4.78	1.79	5.97	10.7	5.88	5.18	3.35
IN.	5.57	1.48	7.68	2.85	4.11	5.49	2.00	6.88	11.98	6.77	5.96	3.74
AC-FT	6770	1800	9340	3470	4990	6680	2430	8360	14560	8230	7240	4550

CAL YR 1985 TOTAL 36951 MEAN 101 MAX 878 MIN 15 CFSM 4.43 IN 60.29 AC-FT 73290
WTR YR 1986 TOTAL 39531 MEAN 108 MAX 878 MIN 15 CFSM 4.74 IN 64.50 AC-FT 78410

15101500 GREENS CREEK NEAR JUNEAU--Continued

WATER QUALITY RECORDS

PERIOD OF RECORD.--Water years 1978 to current.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: December 1978 to September 1984 (discontinued).
WATER TEMPERATURE: December 1978 to September 1984 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)
JUL 30...	1050	87	116	7.70	12.5	8.0	5	0.50	53	7	17	2.5

DATE	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)
JUL 30...	1.3	0.20	43	46	52	11	0.90	<0.10	3.5	69	62	<0.100

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)	ALUMINUM, TOTAL RECOVERABLE (UG/L AS AL) (01105)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)
JUL 30...	0.010	<0.20	<0.010	<0.010	1.6	0.1	1	100	10	<1	<1	<100

DATE	BARIUM, DISSOLVED (UG/L AS BA) (01005)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)
JUL 30...	32	<1	<1	10	<10	<1	<1	2	<1	210	11	<5

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
JUL 30...	<5	10	2	<1	1	<1	<1	<1	<1	10	<3

15106920 KADASHAN RIVER ABOVE HOOK CREEK NEAR TENAKEE

LOCATION.--Lat 57°39'46", long 135°11'06", in NW¼SE¼ sec.34, T.48 S., R.63 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 0.6 mi above Hook Creek, 3.5 mi upstream from mouth at Kadashan Bay, and 9 mi south of Tenakee.

DRAINAGE AREA.--10.2 mi².

PERIOD OF RECORD.--January 1968 to September 1978, October 1980 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 100 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 24, 1969, a site 90 ft downstream at different datum; Oct. 24, 1969 to Sept. 30, 1978, at site 75 ft downstream at datum 1.89 ft higher.

REMARKS.--Estimated daily discharges: Nov. 8-11, Nov. 16 to Dec. 16, and Feb. 15-27. Records good, except those above 200 ft³/s and for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--16 years, 64.2 ft³/s, 85.47 in/yr, 46,510 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,850 ft³/s, Sept. 14, 1976, gage height, 6.60 ft, site and datum then in use, from rating curve extended above 950 ft³/s on basis of slope-area measurement at gage height 5.8 ft, site and datum then in use, from floodmarks; minimum daily, 3.8 ft³/s, Jan. 20, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 500 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Oct. 4	0115	611	4.21	Dec. 18	0515	*1,260	*5.17

Minimum discharge, 4.5 ft³/s, Sept. 18-21, gage height 1.62 ft.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	149	34	10	44	97	106	32	81	114	53	12	74
2	327	30	10	31	154	88	30	84	116	45	17	28
3	188	27	10	28	68	187	64	89	97	36	24	20
4	327	25	14	29	45	155	66	86	98	32	35	16
5	91	22	60	32	34	68	146	89	104	30	34	14
6	56	21	33	66	28	50	89	93	112	28	77	12
7	41	19	24	193	26	40	122	90	122	26	32	11
8	41	18	20	77	24	34	73	107	107	24	20	9.8
9	110	17	17	87	24	39	42	82	131	23	16	9.8
10	184	16	15	88	22	56	33	66	87	23	13	9.4
11	72	16	17	79	18	46	29	82	71	21	46	8.5
12	96	52	15	185	17	67	25	93	68	28	33	7.6
13	108	155	14	343	15	98	23	68	66	30	75	6.9
14	99	75	20	148	14	91	22	78	82	23	30	6.5
15	50	29	60	101	13	82	22	71	78	20	20	6.0
16	75	23	150	64	12	58	35	111	75	17	43	5.5
17	155	20	598	47	12	45	34	97	68	16	96	5.1
18	100	18	744	37	11	49	33	72	75	15	53	4.5
19	60	16	367	33	11	73	72	81	68	13	27	4.5
20	43	15	283	32	10	288	119	89	58	13	20	4.5
21	34	14	247	27	10	197	74	82	72	12	17	4.9
22	34	13	255	27	10	109	53	81	149	13	14	22
23	44	13	170	26	10	104	38	76	139	13	50	105
24	47	12	207	38	30	71	38	89	109	20	28	30
25	37	12	130	253	120	65	37	161	65	21	20	28
26	37	12	74	217	110	95	118	168	52	34	17	19
27	35	11	52	108	150	92	109	153	54	45	15	14
28	30	11	44	60	210	115	81	127	54	23	24	13
29	117	11	43	44	---	88	76	133	47	16	22	12
30	76	10	46	35	---	64	80	123	44	13	15	13
31	48	---	79	34	---	41	---	111	---	12	76	---
TOTAL	2911	767	3828	2613	1305	2761	1815	3013	2582	738	1021	524.5
MEAN	93.9	25.6	123	84.3	46.6	89.1	60.5	97.2	86.1	23.8	32.9	17.5
MAX	327	155	744	343	210	288	146	168	149	53	96	105
MIN	30	10	10	26	10	34	22	66	44	12	12	4.5
CFSM	9.21	2.51	12.1	8.27	4.57	8.74	5.93	9.53	8.44	2.33	3.23	1.72
IN.	10.62	2.80	13.96	9.53	4.76	10.07	6.62	10.99	9.42	2.69	3.72	1.91
AC-FT	5770	1520	7590	5180	2590	5480	3600	5980	5120	1460	2030	1040

CAL YR 1985 TOTAL 29458.0 MEAN 80.7 MAX 744 MIN 10 CFSM 7.91 IN 107.42 AC-FT 58430
WTR YR 1986 TOTAL 23878.5 MEAN 65.4 MAX 744 MIN 4.5 CFSM 6.41 IN 87.08 AC-FT 47360

15106980 TONALITE CREEK NEAR TENAKEE

LOCATION.--Lat 57°40'42", long 135°13'17", in NW¼SW¼ sec.28, T.48 S., R.63 E., Greater Sitka Borough, Hydrologic Unit 19060000, on Chichagof Island, in Tongass National Forest, on right bank 2 mi upstream from mouth and 9 mi south of Tenakee.

DRAINAGE AREA.--14.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1968 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 50 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Mar. 23, 1970, at site 40 ft upstream on left bank at datum 0.30 ft higher.

REMARKS.--Estimated daily discharges: Nov. 8-12 and Nov. 16 to May 21. Records good except for estimated daily discharges, which are fair.

AVERAGE DISCHARGE.--18 years, 97.0 ft^3/s, 90.85 in/yr, 70,280 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,610 ft^3/s, Oct. 9, 1979, gage height, 9.72 ft from floodmarks, from rating curve extended above 390 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, 6.0 ft^3/s, Jan. 15-19, 1974.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,000 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 4	0400	1,680	6.67	Dec. 18	Unknown	*Unknown	*Unknown

Minimum daily discharge, 17 ft^3/s, Nov. 29 to Dec. 3 and Sept. 20

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	222	58	17	72	120	160	43	105	138	55	21	105
2	661	49	17	54	200	120	40	110	154	51	27	53
3	413	44	17	48	82	230	80	115	117	43	30	41
4	745	39	24	50	55	190	84	112	113	39	34	35
5	170	34	100	54	44	100	180	117	121	38	39	31
6	91	32	55	150	37	62	120	120	123	36	83	28
7	67	30	42	310	33	52	150	119	140	34	47	26
8	66	29	33	130	31	46	95	135	127	32	35	24
9	152	28	28	145	29	56	62	108	169	31	29	24
10	305	27	26	145	28	71	45	90	116	30	26	26
11	133	26	28	140	26	62	38	100	94	30	46	23
12	182	34	26	340	25	84	34	119	83	29	41	21
13	187	217	24	560	23	120	31	91	83	32	71	21
14	213	155	36	210	22	115	29	100	99	29	45	19
15	99	56	100	140	21	100	28	96	95	27	36	19
16	114	37	400	100	21	80	44	140	89	26	52	18
17	278	32	1000	72	20	60	43	120	82	24	120	18
18	191	29	1200	60	20	65	44	100	81	24	77	18
19	113	27	550	54	19	83	80	105	77	22	50	18
20	78	25	460	50	19	350	145	115	69	21	40	17
21	61	24	420	47	18	250	110	105	74	21	34	18
22	56	23	430	45	18	140	70	96	141	23	31	30
23	63	22	300	44	18	130	52	94	141	26	84	102
24	69	21	340	60	40	100	49	108	163	31	54	44
25	61	20	180	320	160	85	47	203	91	37	41	46
26	60	19	115	250	140	120	150	223	72	40	35	38
27	54	18	90	120	200	120	140	192	66	64	32	31
28	47	18	73	74	260	140	110	157	64	43	35	28
29	149	17	72	55	---	110	100	164	58	34	35	27
30	129	17	78	46	---	84	103	151	52	26	31	27
31	87	---	130	44	---	60	---	121	---	21	86	---
TOTAL	5316	1207	6411	3989	1729	3545	2346	3831	3092	1019	1447	976
MEAN	171	40.2	207	129	61.8	114	78.2	124	103	32.9	46.7	32.5
MAX	745	217	1200	560	260	350	180	223	169	64	120	105
MIN	47	17	17	44	18	46	28	90	52	21	21	17
CFSM	11.8	2.77	14.3	8.90	4.26	7.86	5.39	8.55	7.10	2.27	3.22	2.24
IN.	13.64	3.10	16.45	10.23	4.44	9.09	6.02	9.83	7.93	2.61	3.71	2.50
AC-FT	10540	2390	12720	7910	3430	7030	4650	7600	6130	2020	2870	1940

CAL YR 1985 TOTAL 45434 MEAN 124 MAX 1200 MIN 17 CFSM 8.55 IN 116.55 AC-FT 90120
WTR YR 1986 TOTAL 34908 MEAN 95.6 MAX 1200 MIN 17 CFSM 6.59 IN 89.55 AC-FT 69240

15106980 TONALITE CREEK NEAR TENAKEE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: June 1968 to current year.

INSTRUMENTATION.--Water-temperature recorder since June 27, 1968. Digital water-temperature recorder set for one-hour-interval punches.

REMARKS.--Temperature servo malfunctioned Oct. 1 to July 30. Records represent water temperature at the sensor within 0.5°C and are good.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 14.0°C, Aug. 12, 1968; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 13.5°C, Sept. 10-12; minimum recorded, 3.0°C, Sept. 17; minimum temperature was probably 0.0°C during period of missing record.

TEMPERATURE, WATER (DEG. C), JULY TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1							---	---	11.0	10.0	10.0	9.5
2							---	---	11.0	10.0	10.0	9.0
3							---	---	11.5	10.0	10.5	9.0
4							---	---	11.5	10.0	10.0	8.0
5							---	---	11.0	10.0	10.5	7.0
6							---	---	10.5	10.0	12.0	6.5
7							---	---	11.5	9.5	13.0	5.5
8							---	---	11.5	9.0	10.5	5.5
9							---	---	11.5	10.0	12.0	8.0
10							---	---	12.0	10.5	13.5	7.5
11							---	---	11.5	10.5	13.5	6.0
12							---	---	11.0	10.5	13.5	5.0
13							---	---	11.5	10.0	13.0	4.5
14							---	---	12.0	9.5	12.0	5.0
15							---	---	11.0	8.5	13.0	5.0
16							---	---	10.0	9.0	12.5	3.5
17							---	---	9.5	9.0	12.5	3.0
18							---	---	10.0	9.0	10.5	4.5
19							---	---	10.5	8.5	12.5	8.0
20							---	---	10.5	8.0	11.0	7.0
21							---	---	11.5	7.5	13.0	9.0
22							---	---	10.5	8.0	11.0	9.0
23							---	---	10.5	9.0	10.0	9.0
24							---	---	10.5	9.0	9.0	8.0
25							---	---	10.0	9.0	8.0	7.0
26							---	---	11.0	9.0	7.5	6.0
27							---	---	10.5	10.0	7.0	5.0
28							---	---	10.5	10.0	8.0	6.5
29							---	---	11.0	9.5	9.5	7.0
30							---	---	9.0	9.0	9.0	8.0
31							10.5	9.5	10.0	9.5	---	---
MONTH									12.0	7.5	13.5	3.0
YEAR	13.5											

15212000 COPPER RIVER NEAR CHITINA
(National stream-quality accounting network station)

LOCATION.--Lat 61°27'56", long 144°27'21", in SW¼NE¼ sec.2, T.5 S., R.5 E., Hydrologic Unit 19050003, on right bank at head of Woods Canyon, 0.5 mi downstream from Taral Creek and abandoned Indian village of Taral, 2.2 mi upstream from Tenas Creek, and 3.5 mi south of Chitina.

DRAINAGE AREA.--20,600 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to September 1950, May to November 1952, October 1955 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 400 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to June 2, 1952, non-recording gage at site 0.2 mi upstream at datum 1.4 ft higher.

REMARKS.--Estimated daily discharges: Oct. 6 to May 19, June 27 TO July 10, and Sept. 23-30. Records good except for estimated daily discharges, which are poor. Streamflow augmented by glaciers, which cover 17 percent of the basin.

AVERAGE DISCHARGE.--31 years, 37,480 ft^3/s, 24.71 in/yr, 27,150,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 380,000 ft^3/s, Aug. 8, 1981, gage height, 37.3 ft, from floodmarks, from rating curve extended above 170,000 ft^3/s on basis of velocity-area study; minimum daily, about 2,000 ft^3/s, Mar. 1-31, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 178,000 ft^3/s, July 22, gage height, 23.32 ft; minimum daily, about 5,800 ft^3/s, Apr. 8-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	39000	14000	10000	8500	7400	6300	6000	7600	44400	84000	94500	57300
2	37800	14000	10000	8500	7400	6300	6000	8000	46700	90000	97200	54700
3	36200	14000	10000	8500	7400	6300	6000	8500	45900	100000	96600	53100
4	34800	14000	10000	8500	7400	6300	6000	9000	45700	115000	98600	51600
5	33900	14000	10000	8500	7400	6300	6000	9500	46100	135000	105000	49400
6	32000	13500	9600	8500	7400	6300	6000	9800	49300	150000	101000	48100
7	31000	13500	9600	8500	7400	6200	6000	10200	53800	148000	85500	46900
8	28500	13500	9600	8500	7400	6200	5800	10800	55300	143000	79200	45900
9	27500	13500	9600	8500	7400	6200	5800	11200	55100	140000	80200	46100
10	26000	13500	9600	8500	7400	6200	5800	12000	52600	138000	85400	45000
11	25000	12500	9000	8000	7000	6200	5800	12500	50900	130000	87600	42400
12	23500	12500	9000	8000	7000	6200	5800	13500	50400	130000	89500	39800
13	23000	12500	9000	8000	7000	6200	5800	14500	51500	130000	88500	38400
14	22000	12500	9000	8000	7000	6200	5800	15500	56900	124000	79200	37000
15	21000	12500	9000	8000	7000	6100	5800	17000	64300	116000	68500	36300
16	20000	12000	9000	8000	7000	6100	5800	18500	74000	113000	63100	35700
17	19000	12000	9000	8000	7000	6100	6000	20000	79600	117000	58300	35800
18	19000	12000	9000	8000	7000	6100	6000	22000	85400	127000	57800	37200
19	18500	12000	9000	8000	7000	6100	6000	24500	86300	144000	59600	38400
20	18000	12000	9000	8000	7000	6000	6200	28100	87100	153000	58500	38900
21	17500	11000	9000	8000	6400	6000	6200	31200	83400	164000	56200	42000
22	17000	11000	9000	8000	6400	6000	6200	32300	82400	173000	55600	44400
23	17000	11000	9000	8000	6400	6000	6400	34600	78700	151000	58200	41000
24	17000	11000	9000	8000	6400	6000	6400	34900	73900	146000	53700	38000
25	17000	11000	9000	8000	6400	6000	6400	35700	70000	135000	50500	36000
26	15500	10500	8500	7400	6400	6000	6400	35900	68700	127000	51300	36000
27	15500	10500	8500	7400	6400	6000	6600	37800	63000	123000	55300	38000
28	15500	10500	8500	7400	6400	6000	6800	41800	65000	109000	62700	36000
29	15500	10500	8500	7400	---	6000	7000	44100	69000	102000	64200	34000
30	15500	10500	8500	7400	---	6000	7400	43100	75000	97400	60900	33000
31	15500	---	8500	7400	---	6000	---	43400	---	97700	58000	---
TOTAL	714200	367500	284000	249400	195200	189900	184200	697500	1910400	3952100	2260400	1256400
MEAN	23040	12250	9161	8045	6971	6126	6140	22500	63680	127500	72920	41880
MAX	39000	14000	10000	8500	7400	6300	7400	44100	87100	173000	105000	57300
MIN	15500	10500	8500	7400	6400	6000	5800	7600	44400	84000	50500	33000
CFSM	1.12	.60	.45	.39	.34	.30	.30	1.09	3.09	6.19	3.54	2.03
IN.	1.29	.66	.51	.45	.35	.34	.33	1.26	3.45	7.14	4.08	2.27
AC-FT	1417000	728900	563300	494700	387200	376700	365400	1383000	3789000	7839000	4484000	2492000

CAL YR 1985 TOTAL 13588100 MEAN 37230 MAX 177000 MIN 5400 CFSM 1.81 IN 24.54 AC-FT 26950000
WTR YR 1986 TOTAL 12261200 MEAN 33590 MAX 173000 MIN 5800 CFSM 1.63 IN 22.14 AC-FT 24320000

15212000 COPPER RIVER NEAR CHITINA--Continued

WATER-QUALITY RECORDS

Period of Record.--Water years 1950-58, 1963-72, 1974-75, and 1978 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM R BK) (72103)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
MAR								
12...	1630	160.0	220	8.50	0.0	743	12.3	86
12...	1640	95.0	269	8.60	0.0	743	10.6	75
12...	1650	44.0	270	8.60	0.0	743	10.6	74
MAY								
20...	1445	600.0	170	8.00	--	--	--	--
20...	1450	545.0	168	8.00	--	--	--	--
20...	1500	450.0	158	8.00	--	--	--	--
20...	1505	380.0	145	8.00	--	--	--	--
20...	1510	270.0	145	7.90	--	--	--	--
JUL								
08...	1251	130.0	232	8.00	12.0	750	9.7	92
08...	1252	250.0	145	8.30	9.5	750	10.0	89
08...	1253	370.0	145	8.40	8.0	750	10.4	89
08...	1254	490.0	145	8.40	7.5	750	10.5	89
08...	1255	610.0	138	8.40	7.0	750	10.5	88
SEP								
18...	1445	180.0	176	8.20	8.0	752	11.5	99
18...	1446	400.0	172	8.20	7.5	752	12.0	101
18...	1447	450.0	170	8.20	7.0	752	12.1	101
18...	1448	530.0	170	8.20	6.5	752	12.2	100
18...	1449	620.0	171	8.20	6.0	752	12.3	101

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	TEMPERATURE, AIR (DEG C) (00020)	TURBIDITY (NTU) (00076)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)
MAR											
12...	1700	297	6120	-6.5	16	< 1	21	130	31	38	7.3
MAY											
20...	1515	630	27800	17.5	200	K1	--	67	8	20	4.2
JUL											
08...	1300	741	143000	15.0	1300	--	--	65	11	21	3.1
AUG											
29...	1200	590	64700	--	320	--	--	66	13	21	3.3
SEP											
18...	1500	660	37700	--	180	< 1	K5	74	11	23	4.0

DATE	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)
MAR											
12...	11	1.8	95	94	114	0	24	21	0.20	13	173
MAY											
20...	4.9	1.5	59	59	72	0	14	6.1	< 0.10	7.3	112
JUL											
08...	3.5	1.4	55	54	--	--	17	2.6	0.30	4.1	78
AUG											
29...	4.6	1.6	54	53	65	0	17	3.0	0.10	5.1	93
SEP											
18...	4.6	1.9	64	63	77	0	20	3.8	0.10	5.8	114

K NON-IDEAL COLONY COUNT

15212000 COPPEP RIVER NEAR CHITINA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)
MAR 12...	170	<0.010	<0.100	0.030	<0.010	--	<0.20	0.050	--	--
MAY 20...	94	<0.010	<0.100	0.070	0.040	0.43	0.50	0.240	0.020	0.020
JUL 08...	86	<0.010	<0.100	0.030	0.010	0.47	0.50	1.90	<0.010	0.010
AUG 29...	88	<0.010	<0.100	0.120	0.020	0.08	0.20	0.480	<0.010	<0.010
SEP 18...	100	<0.010	<0.100	0.070	0.020	--	<0.20	0.100	0.010	<0.010

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)
MAR 12...	1700	50	2	36	<0.5	<1	<1	<3	7	17	<1
AUG 29...	1200	130	2	21	<0.5	<1	<1	<3	4	110	<5
SEP 18...	1500	180	2	24	<0.5	<1	1	<3	3	150	<5

DATE	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
MAR 12...	7	4	<0.1	<10	<1	1	<1	220	<6	15
AUG 29...	11	7	<0.1	<10	2	<1	<1	110	<6	79
SEP 18...	8	9	<0.1	<10	3	<1	<1	120	<6	9

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)
MAR 12...	1700	6120	44	727	--	--	--
MAY 20...	1515	27800	683	51300	12	17	25
JUL 08...	1300	143000	3040	1170000	22	31	42
AUG 29...	1200	64700	956	167000	23	33	44
SEP 18...	1500	37700	431	43900	27	36	46

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
MAR 12...	--	--	--	--	--	--	--
MAY 20...	34	44	57	72	92	100	--
JUL 08...	53	63	72	82	95	100	--
AUG 29...	53	61	70	77	89	98	100
SEP 18...	54	59	65	71	83	97	100

15216000 POWER CREEK NEAR CORDOVA

LOCATION.--Lat 60°35'14", long 145°37'05", in SE¼NW¼ sec.8, T.15 S., R.2 W., Hydrologic Unit 19050003, on right bank at old bridge site, 1 mi upstream from Eyak Lake, and 5.5 mi northeast of Cordova.

DRAINAGE AREA.--20.5 mi².

PERIOD OF RECORD.--July to November 1913 (fragmentary), August 1947 to current year.

REVISED RECORDS.--WDR AK-81-1: 1972 (M), 1975 (M), 1980 (P).

GAGE.--Water-stage recorder. Datum of gage is 33.5 ft above National Geodetic Vertical Datum of 1929 (river-profile survey). July to November 1913, non-recording gage 0.5 mi upstream at different datum. August 1947 to March 1960, water-stage recorder on left bank at same datum.

REMARKS.--Estimated daily discharges: Oct. 29 to Jan. 22 and Jan. 29 to Apr. 17. Records good except for periods of no gage-height record, Oct. 29 to Jan. 22 and Jan. 29 to Apr. 17, which are poor. Streamflow augmented by glaciers, which cover 27 percent of the basin.

AVERAGE DISCHARGE.--39 years, 248 ft³/s, 164.29 in/yr, 179,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 5,540 ft³/s, Sept. 25, 1949, gage height, 7.65 ft, from rating curve extended above 2,300 ft³/s; minimum, 4.6 ft³/s, Apr. 8, 1985, result of temporary ice dam up-stream.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,700 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 23	1700	*2,020	*5.33	Sept.20	1300	1,740	5.15

Minimum discharge, 22 ft³/s, Apr. 26-28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	399	62	38	110	75	55	32	25	266	525	314	384
2	336	62	38	100	75	55	32	26	239	617	334	358
3	324	60	36	300	75	55	30	28	267	445	481	329
4	255	60	36	250	70	50	30	32	250	421	620	299
5	216	60	36	210	70	50	30	35	240	403	447	277
6	192	55	36	190	200	50	30	35	251	367	344	259
7	177	55	50	180	500	48	28	36	337	376	308	237
8	345	50	160	170	200	48	28	39	362	391	499	402
9	644	50	400	200	100	48	28	46	302	373	880	327
10	295	50	350	150	85	46	28	51	266	390	895	262
11	217	50	400	110	75	46	28	51	238	425	602	243
12	183	48	250	100	70	46	26	53	245	485	975	226
13	167	48	150	95	70	44	26	61	282	509	805	215
14	149	48	110	150	70	44	26	84	350	430	443	215
15	140	48	100	110	65	42	26	107	412	371	366	207
16	136	46	95	95	65	42	24	110	475	361	320	198
17	126	46	90	90	65	40	24	113	471	376	302	221
18	115	46	90	85	65	40	24	149	393	450	288	238
19	106	46	120	80	65	40	24	123	374	430	318	233
20	98	45	180	80	65	38	24	115	355	425	277	859
21	95	45	250	75	60	38	25	129	336	422	248	507
22	91	44	350	75	60	38	25	131	369	447	244	300
23	87	44	500	69	60	38	25	133	363	1190	224	229
24	83	42	800	66	60	36	24	162	332	750	254	184
25	79	42	500	63	60	36	23	171	310	540	440	161
26	76	42	350	80	60	36	22	199	316	865	722	147
27	73	40	230	80	55	34	22	226	345	571	1320	135
28	70	40	160	74	55	34	23	240	375	475	667	130
29	68	38	140	70	---	34	23	259	366	421	452	129
30	66	38	130	80	---	32	24	274	402	367	435	172
31	64	---	120	90	---	32	---	296	---	339	391	---
TOTAL	5472	1450	6295	3677	2605	1315	784	3539	9889	14957	15215	8083
MEAN	177	48.3	203	119	93.0	42.4	26.1	114	330	482	491	269
MAX	644	62	800	300	500	55	32	296	475	1190	1320	859
MIN	64	38	36	63	55	32	22	25	238	339	224	129
CFSM	8.63	2.36	9.90	5.81	4.54	2.07	1.27	5.56	16.1	23.5	24.0	13.1
IN.	9.93	2.63	11.42	6.67	4.73	2.39	1.42	6.42	17.94	27.14	27.61	14.67
AC-FT	10850	2880	12490	7290	5170	2610	1560	7020	19610	29670	30180	16030

CAL YR 1985 TOTAL 84455 MEAN 231 MAX 1900 MIN 24 CFSM 11.3 IN 153.25 AC-FT 167500
WTR YR 1986 TOTAL 73281 MEAN 201 MAX 1320 MIN 22 CFSM 9.81 IN 132.97 AC-FT 145400

15237360 SAN JUAN RIVER NEAR SEWARD

LOCATION.--Lat 59°49'05", long 147°53'00", in SE¼NW¼ sec.22, T.4 S., R.9 E., Hydrologic Unit 19050003, on Montague Island, in Chugach National Forest, on right bank 0.5 mi upstream from mouth, 16 mi south of Latouche, and 60 mi east of Seward.

DRAINAGE AREA.--12.4 mi^2.

PERIOD OF RECORD.--June to September 1986.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--No estimated daily discharges. Records good.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period June to September, 1,730 ft^3/s, Sept. 8, gage height, 7.98 ft, from rating curve extended above 200 ft^3/s on basis of step-backwater computation; minimum discharge, 14 ft^3/s, July 22.

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									221	49	22	151
2									261	53	22	131
3									676	43	229	92
4									304	38	264	60
5									203	32	122	47
6									157	96	75	39
7									328	133	50	89
8									610	64	715	778
9									231	46	403	118
10									184	36	245	66
11									119	32	174	47
12									104	31	169	38
13									98	32	91	35
14									96	27	60	30
15									109	23	128	27
16									115	59	158	25
17									104	32	63	27
18									86	24	51	31
19									60	21	112	26
20									56	17	60	305
21									115	17	44	84
22									276	35	37	50
23									121	411	32	46
24									84	87	114	34
25									65	62	303	29
26									53	325	1100	24
27									50	67	527	41
28									46	43	163	41
29									41	32	89	36
30									49	26	244	36
31									---	24	404	---
TOTAL									5022	2017	6270	2583
MEAN									167	65.1	202	86.1
MAX									676	411	1100	778
MIN									41	17	22	24
CFSM									13.5	5.25	16.3	6.94
IN.									15.06	6.05	18.81	7.75
AC-FT									9960	4000	12440	5120

15238648 UPPER NUKA RIVER NEAR HOMER

LOCATION.--Lat 59°41'04", long 150°42'12", Kenai Peninsula Borough, Hydrologic Unit 19050003, on left bank, 0.4 mi downstream from terminus of Nuka Glacier, 4.9 mi southeast of Bradley Lake, and 29 mi east of Homer.

DRAINAGE AREA.--About 3 mi^2. Drainage area varies according to position of glacier terminus.

PERIOD OF RECORD.--Occasional low-flow measurements, water years 1980-81, prior to shift in glacier terminus; September 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,300 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct, 5, 14, 15, and Oct. 17 to Apr. 28. Records good except for period of no gage-height record, Nov. 4 to Apr. 28, and periods with ice effect, Oct. 5, 14, 15, and Oct. 17 to Nov. 3, which are poor. Streamflow augmented by glaciers, which cover about three-fourths of the basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 709 ft^3/s, Sept. 27, 1985, gage height, 4.42 ft, from rating curve extended above 200 ft^3/s; minimum daily, about 0.10 ft^3/s, Jan. 11 to Apr. 28, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.-- No flow was observed Oct. 28, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 499 ft^3/s, May 23, gage height, 4.20 ft; minimum recorded, 0.12 ft^3/s, June 3; minimum daily, about 0.10 ft^3/s, Jan. 11 to Apr. 28.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	164	2.0	.50	.50	.10	.10	.10	13	1.1	10	9.2	7.1
2	127	2.0	.50	.50	.10	.10	.10	64	.61	9.2	12	8.0
3	89	2.0	.50	.50	.10	.10	.10	104	69	11	26	7.0
4	67	1.5	.50	.50	.10	.10	.10	78	78	12	10	6.0
5	56	1.5	.50	.50	.10	.10	.10	99	33	9.8	8.0	4.8
6	55	1.5	.50	.50	.10	.10	.10	133	16	11	5.6	6.5
7	49	1.5	.50	.50	.10	.10	.10	104	12	8.6	8.0	30
8	56	1.5	.50	.50	.10	.10	.10	71	21	9.2	19	28
9	49	1.5	.50	.50	.10	.10	.10	44	13	8.0	12	6.5
10	37	1.0	.50	.50	.10	.10	.10	31	13	10	11	6.5
11	30	1.0	.50	.10	.10	.10	.10	23	10	13	8.0	6.0
12	25	1.0	.50	.10	.10	.10	.10	44	10	9.8	9.5	5.6
13	22	1.0	.50	.10	.10	.10	.10	146	12	7.0	7.0	5.6
14	20	1.0	.50	.10	.10	.10	.10	180	15	8.0	5.6	5.6
15	18	1.0	.50	.10	.10	.10	.10	92	18	12	6.0	7.0
16	16	1.0	.50	.10	.10	.10	.10	41	18	7.5	7.5	12
17	14	1.0	.50	.10	.10	.10	.10	31	13	12	7.5	9.8
18	11	1.0	.50	.10	.10	.10	.10	58	8.6	13	6.5	6.0
19	7.5	1.0	.50	.10	.10	.10	.10	104	9.2	12	6.5	7.5
20	6.0	1.0	.50	.10	.10	.10	.10	168	11	11	7.0	16
21	5.5	1.0	.50	.10	.10	.10	.10	342	10	9.8	6.5	6.6
22	5.0	1.0	.50	.10	.10	.10	.10	434	9.2	13	7.5	6.0
23	4.5	1.0	.50	.10	.10	.10	.10	450	8.0	12	8.0	3.7
24	4.0	1.0	.50	.10	.10	.10	.10	339	8.0	7.5	8.6	1.7
25	4.0	.50	.50	.10	.10	.10	.10	210	7.5	7.5	14	1.2
26	3.5	.50	.50	.10	.10	.10	.10	148	7.5	11	55	.95
27	3.0	.50	.50	.10	.10	.10	.10	137	9.8	12	26	5.2
28	3.0	.50	.50	.10	.10	.10	.10	76	11	10	12	5.6
29	2.5	.50	.50	.10	---	.10	1.7	60	9.8	10	9.2	7.0
30	2.5	.50	.50	.10	---	.10	4.0	44	11	9.8	19	5.6
31	2.0	---	.50	.10	---	.10	---	29	---	9.2	17	---
TOTAL	958.0	33.00	15.50	7.10	2.80	3.10	8.50	3897	473.31	315.9	374.7	235.05
MEAN	30.9	1.10	.50	.23	.10	.10	.28	126	15.8	10.2	12.1	7.84
MAX	164	2.0	.50	.50	.10	.10	4.0	450	78	13	55	30
MIN	2.0	.50	.50	.10	.10	.10	.10	13	.61	7.0	5.6	.95
AC-FT	1900	65	31	14	5.6	6.1	17	7730	939	627	743	466

CAL YR 1985 TOTAL 21800.90 MEAN 59.7 MAX 505 MIN .50 AC-FT 43240
WTR YR 1986 TOTAL 6323.96 MEAN 17.3 MAX 450 MIN .10 AC-FT 12540

15238820 BARBARA CREEK NEAR SELDOVIA

LOCATION.--Lat 59°28'50", long 151°38'42", in SW¼ sec.15, T.8 S., R.14 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 0.5 mi upstream from mouth and 3.7 mi northeast of Seldovia.

DRAINAGE AREA.--20.7 mi^2.

PERIOD OF RECORD.--June 1972 to current year.

REVISIONS.--WDR AK-84-1:1982 (M).

GAGE.--Water-stage recorder. Elevation of gage is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 6, 1980, at site 50 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 18 to Dec. 9 and Jan. 11 to Apr. 29. Records fair except for periods of no gage-height record, Oct. 18 to Dec. 3 , Jan. 11 to Feb. 3, and Feb. 22 to Apr. 29, and periods with ice effect, Dec. 4-9 and Feb. 4-21, which are poor. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--14 years, 103 ft^3/s, 67.57 in/yr, 74,620 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,050 ft^3/s, Nov. 29, 1983, gage height, 6.08 ft, from rating curve extended above 360 ft^3/s on basis of contracted-opening measurement of peak flow; minimum, 5.4 ft^3/s, Apr. 18 and 22, 1982, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 684 ft^3/s, Dec. 23, gage height, 3.27 ft, from rating curve extended as explained above; minimum daily, about 26 ft^3/s, Apr. 3-12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	283	50	27	71	42	31	27	74	236	130	47	93
2	223	45	27	69	42	30	27	76	223	124	46	87
3	177	45	27	116	42	30	26	79	288	120	49	80
4	147	45	27	223	42	30	26	80	380	115	47	72
5	123	40	27	175	41	30	26	79	323	109	45	68
6	118	40	27	124	43	29	26	82	268	107	44	64
7	115	40	27	103	48	29	26	83	246	99	42	69
8	131	40	27	91	56	29	26	87	265	92	50	92
9	140	40	27	84	54	29	26	83	246	87	46	88
10	137	80	62	80	52	29	26	82	236	83	47	80
11	125	60	260	70	49	30	26	82	221	82	47	76
12	118	40	193	70	47	31	26	82	206	80	48	71
13	108	40	102	60	45	31	27	85	202	76	47	68
14	98	35	76	60	44	32	28	85	209	72	47	64
15	101	35	70	50	43	32	28	87	228	69	49	61
16	96	35	63	48	42	32	29	90	249	71	49	62
17	93	30	59	46	41	32	30	95	262	66	46	59
18	90	30	56	44	40	32	33	99	223	64	47	57
19	85	30	59	44	39	32	35	104	192	62	46	57
20	85	30	63	44	38	32	37	111	183	61	45	65
21	80	30	93	44	37	32	40	124	174	61	45	58
22	75	30	206	42	36	32	43	132	161	65	44	64
23	70	28	424	42	35	32	45	140	148	65	45	61
24	70	28	279	42	34	32	47	163	137	59	42	58
25	65	28	168	42	33	31	52	202	132	57	42	54
26	60	70	140	42	32	31	54	219	126	54	53	54
27	60	60	120	42	32	30	56	221	128	53	80	53
28	55	40	99	42	31	29	60	221	128	50	87	53
29	55	30	91	42	---	29	64	241	130	49	80	51
30	50	28	84	42	---	28	74	257	128	47	92	50
31	50	---	79	42	---	28	---	251	---	49	100	---
TOTAL	3283	1202	3089	2136	1160	946	1096	3896	6278	2378	1644	1989
MEAN	106	40.1	99.6	68.9	41.4	30.5	36.5	126	209	76.7	53.0	66.3
MAX	283	80	424	223	56	32	74	257	380	130	100	93
MIN	50	28	27	42	31	28	26	74	126	47	42	50
CFSM	5.12	1.94	4.81	3.33	2.00	1.47	1.76	6.09	10.1	3.71	2.56	3.20
IN.	5.90	2.16	5.55	3.84	2.08	1.70	1.97	7.00	11.28	4.27	2.95	3.57
AC-FT	6510	2380	6130	4240	2300	1880	2170	7730	12450	4720	3260	3950

CAL YR 1985	TOTAL	39987	MEAN	110	MAX	750	MIN	18	CFSM	5.31	IN	71.86	AC-FT	79310
WTR YR 1986	TOTAL	29097	MEAN	79.7	MAX	424	MIN	26	CFSM	3.85	IN	52.29	AC-FT	57710

15238990 UPPER BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°42'15", long 150°42'15", Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 1.2 mi downstream of Nuka Glacier terminus, 2.5 mi upstream of mouth at Kachemak Creek, 3.5 mi southeast of Bradley Lake, and 29 mi east of Homer.

DRAINAGE AREA.--About 10 mi². Drainage area varies according to position of glacier terminus. The drainage area became smaller on June 1983 as snowmelt runoff from Nuka Glacier began to flow again into both the Nuka and Bradley River drainage basins.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,200 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 18 to May 16, and Sept. 18-30. Records good except for periods of no gage-height record, Oct. 30 to Feb. 3, Feb. 23 to Apr. 28, and Sept. 18-30, and periods with ice effect, Oct. 18-29, Feb. 4-22, and Apr. 29 to May 16, which are poor.

AVERAGE DISCHARGE.--7 years, 108 ft³/s, 78,250 acre-ft/yr, not adjusted to account for change in drainage area.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 2,150 ft³/s, Aug. 27, 1986, gage height, 9.30 ft, from rating curve extended above 450 ft³/s on basis of slope-area measurement, at gage height, 9.86 ft, for flood of Oct. 10, 1986; maximum gage height, 13.09 ft, Dec. 17, 1981, backwater from ice; no flow Dec. 25, 1979 to Jan. 19, 1980 and Mar. 17 to May 1, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,150 ft³/s, Aug. 27, gage height, 9.30 ft, from rating curve extended above 450 ft³/s as explained above; maximum gage height, 9.67 ft, May 2, backwater from ice; no flow Mar. 17 to May 1.

REVISIONS.--Revised maximum discharges for water years 1980-1985, and revised daily discharges, in cubic feet per second, for high-water periods in these years, are given below. These figures supercede those published in the reports for 1980-85.

Water year	Date	Discharge (fts³/s)	Gage height (ft)	Water year	Date	Discharge (fts³/s)	Gage height (ft)
1980	Aug. 10	1,180	7.40	1983	Aug. 8	379	6.37
1981	Aug. 11	780	6.62	1984	Aug. 19	906	7.43
1982	Sept.15	2,040	8.98	1985	Sept.27	686	7.02

Daily discharges:

Aug. 3, 1980...405
7.........363
9.........613
10.........981
11........1030
12.........833
13.........584
14.........420
15.........391
16.........486
17.........396
18.........396
19.........420

July 24, 1981...750

Aug. 6, 1981...550
7.........600
8.........650
9.........750
10.........750
11.........750
12.........750
13.........750
14.........700
15.........650
16.........600
17.........550
18.........500
19.........500
22.........550
23.........500

Aug. 29, 1981...500
30.........550

Sept. 5, 1982...992
6.........884
7.........643
13.........752
14.........823
15........1350
16........1510
17........1120
18........1180
19.........930
20.........992
21........1360
22.........833
23.........579

Aug. 8, 1983...337
9.........284

Aug. 18, 1984...383
19.........722
20.........388
21.........261
22.........312
23.........257
24.........292
25.........308

Sept. 27, 1985...538
28.........296
29.........383

	TOTAL	MEAN	MAX	MIN	AC-FT
August 1980	12046	389	1030	161	23890
WTR YR 1980	51775.5	141	1030	0.00	102700
July 1981	14200	458	750	200	28170
August 1981	17650	569	750	500	35010
CAL YR 1980	45362.5	124	1030	.00	89980
WTR YR 1981	53576	147	750	1.0	106300
September 1982	20191	673	1510	210	40050
CAL YR 1981	52184	143	750	1.0	103500
WTR YR 1982	53947	148	1510	1.0	107000
August 1983	4352	140	337	76	8630
CAL YR 1982	52004	142	1510	1.0	103100
WTR YR 1983	19311.5	52.9	337	.50	38300
August 1984	6425	207	722	50	12740
CAL YR 1983	20323.5	55.7	337	.50	40310
WTR YR 1984	21850.6	59.7	722	.60	43340
September 1985	3599	120	538	42	7140
CAL YR 1984	21015.6	57.4	722	.60	41680
WTR YR 1985	18098.5	49.6	538	.50	35900

15238990 UPPER BRADLEY RIVER NEAR HOMER--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	98	7.0	2.0	1.0	.50	.50	.00	.00	159	269	376	771
2	67	6.5	2.0	1.0	.50	.50	.00	.50	136	265	480	612
3	51	6.0	1.5	1.0	.50	.50	.00	.50	182	278	779	553
4	42	6.0	1.5	1.0	.70	.50	.00	2.0	195	300	880	471
5	35	5.5	1.5	1.0	.70	.50	.00	3.0	140	280	667	380
6	40	5.0	1.5	1.0	.50	.50	.00	4.0	112	280	497	356
7	39	5.0	1.5	1.0	.20	.50	.00	5.0	125	292	445	662
8	62	4.5	1.5	1.0	.20	.50	.00	6.5	166	300	777	1040
9	45	4.5	1.5	1.0	1.0	.50	.00	8.5	122	253	729	766
10	33	4.5	1.5	1.0	.40	.50	.00	11	114	323	641	658
11	28	4.0	1.5	1.0	.40	.50	.00	15	114	386	496	569
12	25	4.0	1.5	1.0	.40	.50	.00	20	107	358	452	458
13	22	4.0	1.5	1.0	.50	.50	.00	26	117	293	350	395
14	19	3.5	1.5	1.0	.50	.50	.00	35	139	288	236	372
15	19	3.5	1.5	1.0	.50	.50	.00	45	198	280	216	402
16	19	3.5	1.5	1.0	.50	.50	.00	60	252	289	230	583
17	17	3.0	1.5	1.0	.50	.00	.00	84	265	352	227	656
18	16	3.0	1.0	.50	.50	.00	.00	120	220	430	171	702
19	16	3.0	1.0	.50	.50	.00	.00	205	191	492	133	740
20	14	3.0	1.0	.50	.50	.00	.00	246	186	590	146	900
21	14	2.5	1.0	.50	.50	.00	.00	220	191	650	126	780
22	12	2.5	1.0	.50	.50	.00	.00	199	195	679	229	620
23	12	2.5	1.0	.50	.50	.00	.00	182	178	611	319	540
24	10	2.5	1.0	.50	.50	.00	.00	166	155	515	386	490
25	10	2.5	1.0	.50	.50	.00	.00	182	147	458	599	430
26	9.5	2.0	1.0	.50	.50	.00	.00	166	170	491	1340	370
27	9.0	2.0	1.0	.50	.50	.00	.00	162	199	541	1890	340
28	8.5	2.0	1.0	.50	.50	.00	.00	159	213	492	1380	290
29	8.0	2.0	1.0	.50	---	.00	.00	178	209	446	1020	250
30	7.5	2.0	1.0	.50	---	.00	.00	166	236	409	1110	220
31	7.0	---	1.0	.50	---	.00	---	174	---	379	1130	---
TOTAL	814.5	111.5	40.5	24.00	14.00	8.00	.00	28[illegible].00	5133	12269	18457	16376
MEAN	26.3	3.72	1.31	.77	.50	.26	.000	[illegible]2.0	171	396	595	546
MAX	98	7.0	2.0	1.0	1.0	.50	.00	246	265	679	1890	1040
MIN	7.0	2.0	1.0	.50	.20	.00	[illegible]	.00	107	253	126	220
AC-FT	1620	221	80	48	28	16	.00	5650	10180	24340	36610	32480

CAL YR 1985 TOTAL 17490.00 MEAN 47.9 MAX 538 MIN .50 AC-FT 34690
WTR YR 1986 TOTAL 56098.50 MEAN 154 MAX 1890 MIN .00 AC-FT 111300

15238990 UPPER BRADLEY RIVER NEAR HOMER--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1979 to current year (Seasonal).

INSTRUMENTATION.--Continious graphic temperature recorder October 1979 to August 1984. Electronic water temperature recorder since June 1985, set for one-hour recording interval; prior to December 1986, set for thirty-minute recording interval.

REMARKS.--No record Oct. 27 to Dec. 3, due to frozen probe, and Mar. 3 to Aug. 11 due to equipment malfunction. Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross sections on June 25, and Aug. 12. A maximum variation of 1.0°C was found within the cross sections.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 7.0°C, June 22, 1984; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 4.5°C, Oct. 9 and Aug. 19, but may have been higher during period of no record, June 1 to Aug. 11; minimum, 0.0°C, on many days during the winter.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	2.0	.5			---	---	.5	.5	1.0	.5	1.0	1.0
2	3.5	.5			---	---	.5	.5	1.0	.5	1.0	1.0
3	1.5	.0			---	---	.5	.5	.5	.5	---	---
4	3.5	.5			.5	.5	.5	.5	.5	.5	---	---
5	2.5	.0			.5	.5	.5	.5	.5	.5	---	---
6	2.0	1.0			.5	.5	.5	.5	.5	.5	---	---
7	2.5	.5			.5	.5	.5	.5	.5	.5	---	---
8	3.5	.5			.5	.5	.5	.5	1.0	.5	---	---
9	4.5	1.0			.5	.5	.5	.5	1.0	.5	---	---
10	3.5	1.5			.5	.5	.5	.5	1.0	1.0	---	---
11	4.0	.5			.5	.5	.5	.5	1.0	1.0	---	---
12	3.5	.5			.5	.5	.5	.5	1.0	.5	---	---
13	3.5	.5			.5	.5	.5	.5	.5	.5	---	---
14	3.0	.0			.5	.5	.5	.5	.5	.5	---	---
15	1.0	.0			.5	.5	.5	.5	.5	.5	---	---
16	3.0	.5			.5	.5	.5	.5	.5	.5	---	---
17	3.0	.0			.5	.5	.5	.5	.5	.5	---	---
18	.5	.0			.5	.5	.5	.5	.5	.5	---	---
19	.0	.0			.5	.5	.5	.5	.5	.5	---	---
20	.0	.0			.5	.5	.5	.5	.5	.5	---	---
21	.0	.0			.5	.5	.5	.5	.5	.5	---	---
22	.0	.0			.5	.5	.5	.5	1.0	.5	---	---
23	.0	.0			.5	.5	.5	.5	1.0	1.0	---	---
24	.0	.0			.5	.5	.5	.5	1.0	1.0	---	---
25	.0	.0			.5	.5	.5	.5	1.0	.5	---	---
26	.0	.0			.5	.5	.5	.5	1.0	.5	---	---
27	---	---			.5	.5	.5	.5	1.0	.5	---	---
28	---	---			.5	.5	.5	.5	1.0	.5	---	---
29	---	---			.5	.5	.5	.5	---	---	---	---
30	---	---			.5	.5	.5	.5	---	---	---	---
31	---	---			.5	.5	1.0	.5	---	---	---	---
MONTH	4.5	.0			.5	.5	1.0	.5	1.0	.5		

15238990 UPPER BRADLEY RIVER NEAR HOMER--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1									---	---	1.5	.5
2									---	---	2.0	.5
3									---	---	1.5	.5
4									---	---	2.0	.5
5									---	---	2.0	.5
6									---	---	1.5	1.0
7									---	---	1.5	1.0
8									---	---	1.0	.5
9									---	---	1.5	.5
10									---	---	2.0	.5
11									---	---	1.5	.5
12									1.5	.5	2.0	.5
13									2.0	.5	2.0	.5
14									2.0	.5	2.0	.5
15									1.5	.5	1.5	1.0
16									2.5	.5	1.5	1.0
17									2.0	.5	1.0	.5
18									1.0	.5	1.0	.5
19									4.5	1.0	1.0	.5
20									2.5	.5	1.5	.5
21									4.0	.0	1.5	.5
22									2.0	.5	1.0	.5
23									1.0	.5	1.5	.0
24									1.0	.5	2.0	.0
25									1.0	.5	1.5	.0
26									2.0	1.0	1.5	.0
27									1.5	1.0	2.0	1.0
28									1.5	.5	3.0	1.0
29									1.0	.5	2.0	1.0
30									1.5	1.0	2.0	1.0
31									1.5	.5	---	---
MONTH										.0	3.0	.0

15239000 BRADLEY RIVER NEAR HOMER

LOCATION.--Lat 59°45'24", long 150°51'02", in NE¼SW¼ sec.8, T.5 S., R.9 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on right bank about 800 ft downstream from Bradley Lake outlet, 3.5 mi upstream from Bradley River tributary, and 26 mi northeast of Homer. Prior to Apr. 29, 1986, at site 800 ft upstream.

DRAINAGE AREA.--54 mi², approximately. Drainage area varies according to position of glacier terminus in headwaters and could be about 4 mi² greater.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--July to August 1955, October 1957 to current year.

REVISED RECORDS.--WSP 2136: 1960(M), 1965. WDR AK-77-1: 1958, 1961, 1963(M), 1966, 1967, 1970, 1972, 1974, 1976.

GAGE.--Water-stage recorder. Elevation of gage is 1,050 ft above National Geodetic Vertical Datum of 1929, from topographic map. July 13-22, 1955, non-recording lake gage at site 1 mi upstream and July 23 to Aug. 5, 1955, at site 3 mi upstream at different datums. Prior to Nov. 4, 1980, water-stage recorder at present site and datum and Nov. 4, 1980 to Apr. 28, 1986, water-stage recorder 800 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 12 to Apr. 29, Aug. 27 to Sept. 1, Sept. 7-9, and Sept. 16-21. Records fair except for period with ice effect, Apr. 29, and the periods of no gage-height record, Oct. 12 to Apr. 28 and Aug. 27 to Sept. 1, which are poor. Glaciers cover 36 percent of the basin.

AVERAGE DISCHARGE.--29 years, 430 ft³/s, 311,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,020 ft³/s, Aug. 10, 1979, gage height, 9.46 ft; minimum daily, about 16 ft³/s, Mar. 26 to Apr. 25, 1972.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, about 3,500 ft³/s, Aug. 28; minimum daily, about 28 ft³/s, Apr. 23-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1250	70	46	70	65	60	45	84	667	967	1100	1900
2	959	65	44	65	65	60	40	98	628	1080	1100	1500
3	750	65	44	65	65	60	40	112	643	1150	1390	1230
4	602	65	44	60	65	60	40	117	758	1200	1880	1040
5	500	65	44	60	65	60	40	127	746	1240	1690	899
6	432	65	44	60	65	55	40	141	660	1240	1480	809
7	391	65	44	55	65	55	40	151	598	1260	1260	860
8	396	65	44	55	70	55	40	160	654	1260	1340	1200
9	384	60	44	55	70	55	40	171	667	1230	1600	1260
10	357	60	44	50	70	55	40	170	606	1200	1600	1160
11	326	60	150	50	65	55	35	170	558	1240	1460	1010
12	290	60	140	50	65	55	35	170	516	1290	1380	885
13	265	60	130	50	65	55	35	178	480	1240	1250	791
14	240	60	120	60	65	55	35	195	493	1130	1100	713
15	230	60	110	80	65	50	35	206	546	1130	985	683
16	210	60	100	75	60	50	30	208	690	1090	899	800
17	190	60	90	70	60	50	30	204	834	1090	855	880
18	180	60	80	70	60	50	30	208	897	1180	836	920
19	160	60	70	70	60	50	30	221	893	1300	782	1000
20	140	60	65	70	60	50	30	243	869	1480	759	1020
21	120	60	65	70	60	50	30	270	869	1520	742	980
22	110	60	65	70	60	50	30	307	841	1580	764	948
23	100	60	140	70	60	45	28	334	818	1680	859	856
24	90	60	130	70	60	45	28	367	769	1580	947	710
25	85	60	120	70	60	45	28	417	700	1440	1040	576
26	80	110	110	70	60	45	30	454	675	1310	1710	494
27	75	90	100	70	60	45	40	508	704	1320	3300	437
28	75	70	90	65	60	45	50	533	746	1330	3500	395
29	70	55	80	65	---	45	60	568	812	1270	2400	373
30	70	50	75	65	---	45	74	619	855	1240	2000	362
31	70	---	70	65	---	45	---	663	---	1170	2050	---
TOTAL	9197	1920	2542	1990	1770	1600	1128	8374	21192	39437	44058	26691
MEAN	297	64.0	82.0	64.2	63.2	51.6	37.6	270	706	1272	1421	890
MAX	1250	110	150	80	70	60	74	663	897	1680	3500	1900
MIN	70	50	44	50	60	45	28	84	480	967	742	362
AC-FT	18240	3810	5040	3950	3510	3170	2240	16610	42030	78220	87390	52940

CAL YR 1985 TOTAL 122788 MEAN 336 MAX 1870 MIN 26 AC-FT 243500
WTR YR 1986 TOTAL 159899 MEAN 438 MAX 3500 MIN 28 AC-FT 317200

15239000 BRADLEY RIVER NEAR HOMER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1957-60, 1968, 1970-73, and 1979 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1979 to September 1985 (fragmentary) and current year.

INSTRUMENTATION.-- Digital water temperature recorder since October 1979, set for one-hour recording interval.

REMARKS.--No record Feb. 5 to Apr. 28, due to recorder malfunction. Records represent water temperature at the sensor within 0.5°C. No temperature cross sections were run during 1986 water year. A maximum variation observed within the cross sections from previous years was 1.5°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 12.0°C, Aug. 20, 1982; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 9.0°C, July 14, minimum, 0.0°C, many days during winter period.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	8.0	8.0	4.5	4.0	.5	.0	.5	.0	.0	.0		
2	8.0	8.0	4.0	4.0	.5	.0	.0	.0	.0	.0		
3	8.0	7.5	4.0	4.0	.0	.0	.0	.0	.0	.0		
4	8.0	7.5	4.0	3.5	.0	.0	.0	.0	.0	.0		
5	8.0	7.5	3.5	3.0	.5	.0	.0	.0	---	---		
6	7.5	7.5	3.0	3.0	.0	.0	.0	.0	---	---		
7	7.5	7.5	3.5	3.0	.0	.0	.0	.0	---	---		
8	7.5	7.5	3.0	3.0	.0	.0	.0	.0	---	---		
9	7.5	7.0	3.0	2.5	.0	.0	.0	.0	---	---		
10	7.5	7.5	2.5	2.5	.5	.0	.0	.0	---	---		
11	7.0	7.0	2.5	2.5	.0	.0	.0	.0	---	---		
12	7.0	7.0	2.5	2.5	.5	.0	.0	.0	---	---		
13	7.0	7.0	2.5	2.5	.5	.0	.0	.0	---	---		
14	7.0	7.0	2.5	2.0	.5	.0	.0	.0	---	---		
15	7.0	7.0	2.5	2.0	.0	.0	.0	.0	---	---		
16	7.0	6.5	2.0	2.0	.0	.0	.0	.0	---	---		
17	7.0	6.5	2.0	1.5	.0	.0	.0	.0	---	---		
18	6.5	6.5	1.5	.5	.0	.0	.0	.0	---	---		
19	6.5	6.0	1.0	.5	.0	.0	.0	.0	---	---		
20	6.5	6.0	1.0	.5	.5	.0	.0	.0	---	---		
21	6.0	6.0	1.0	.5	.0	.0	.0	.0	---	---		
22	6.0	6.0	1.0	1.0	.0	.0	.0	.0	---	---		
23	6.0	5.5	1.0	1.0	.5	.0	.0	.0	---	---		
24	5.5	5.5	1.0	1.0	.5	.0	.0	.0	---	---		
25	5.5	5.5	1.0	.5	.5	.0	.0	.0	---	---		
26	5.5	5.0	1.0	.5	.5	.5	.0	.0	---	---		
27	5.0	5.0	.5	.5	.5	.5	.0	.0	---	---		
28	5.0	5.0	.5	.5	.5	.0	.0	.0	---	---		
29	5.0	4.5	.5	.5	.5	.0	.0	.0	---	---		
30	4.5	4.5	.5	.5	.5	.0	.0	.0	---	---		
31	4.5	4.5	---	---	.5	.0	.0	.0	---	---		
MONTH	8.0	4.5	4.5	.5	.5	.0	.5	.0		.0		

15239000 BRADLEY RIVER NEAR HOMER--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	---	---	.5	.0	2.0	2.0	5.5	5.0	8.0	8.0	7.5	7.0
2	---	---	.5	.0	2.0	2.0	5.0	5.0	8.0	8.0	7.5	7.0
3	---	---	.5	.0	2.0	2.0	5.5	5.0	8.0	8.0	8.0	7.0
4	---	---	.5	.0	2.0	2.0	6.0	5.0	8.0	8.0	8.0	7.0
5	---	---	.5	.0	2.5	2.0	6.0	5.5	8.0	7.5	8.0	7.0
6	---	---	.5	.0	2.5	2.0	6.0	5.5	8.5	7.5	8.0	7.5
7	---	---	.5	.0	2.5	2.5	6.0	5.5	8.0	7.5	7.5	7.5
8	---	---	.5	.5	2.5	2.5	6.5	6.0	8.0	7.5	7.5	6.5
9	---	---	.5	.5	3.0	2.5	6.5	6.0	7.5	7.5	7.0	6.0
10	---	---	.5	.5	3.0	2.5	6.0	5.5	7.5	7.5	6.5	6.0
11	---	---	.5	.5	3.0	2.5	5.5	5.5	8.0	7.0	6.0	6.0
12	---	---	.5	.5	3.0	3.0	6.0	5.5	7.5	7.5	7.0	6.0
13	---	---	.5	.5	3.5	3.0	6.0	5.5	7.5	6.0	6.5	6.0
14	---	---	.5	.5	3.5	3.0	9.0	6.0	7.0	6.0	7.5	6.0
15	---	---	.5	.5	3.5	3.0	7.5	7.0	7.0	7.0	7.0	7.0
16	---	---	.5	.5	4.0	3.0	7.0	6.0	7.0	6.5	7.0	7.0
17	---	---	.5	.5	4.0	3.5	6.5	5.5	7.0	6.5	7.0	7.0
18	---	---	.5	.5	4.0	3.5	6.0	5.5	7.5	7.0	7.0	7.0
19	---	---	.5	.5	4.0	4.0	7.5	6.0	8.0	7.5	7.0	7.0
20	---	---	.5	.5	4.0	4.0	7.5	7.0	8.0	7.5	7.0	6.5
21	---	---	1.0	.5	4.0	4.0	7.5	6.5	8.0	7.0	7.5	6.5
22	---	---	1.0	.5	4.5	4.0	8.5	7.5	7.0	6.5	7.0	6.5
23	---	---	1.0	.5	4.5	4.0	8.0	7.5	7.5	6.5	6.5	6.0
24	---	---	1.0	1.0	4.5	4.5	7.5	6.5	7.5	7.5	6.0	6.0
25	---	---	1.0	.5	4.5	4.5	7.0	6.5	7.5	7.5	6.0	6.0
26	---	---	1.5	1.0	6.0	4.5	7.0	6.0	7.5	7.5	6.0	6.0
27	---	---	1.5	1.0	5.5	5.0	6.5	6.0	7.5	7.5	6.0	6.0
28	---	---	1.5	1.0	5.0	5.0	8.0	6.5	7.5	7.5	6.0	6.0
29	.5	.0	2.0	1.5	5.5	5.0	8.0	7.5	7.5	7.5	6.0	6.0
30	.5	.0	2.0	1.5	5.5	5.0	8.0	7.5	7.5	7.5	6.5	6.0
31	---	---	2.0	1.5	---	---	8.0	7.5	7.5	7.0	---	---
MONTH		.0	2.0	.0	6.0	2.0	9.0	5.0	8.5	6.0	8.0	6.0
YEAR	9.0	.0										

15239050 BRADLEY RIVER TRIBUTARY NEAR HOMER

LOCATION.--Lat 59°46'42", long 150°45'15", in NW¼NE¼ sec.2, T.5 S., R.9 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 6.0 mi upstream from mouth and 27 mi east of Homer.

DRAINAGE AREA.--9.25 mi^2.

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 2,300 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 14, Oct. 17 to Feb. 3, Feb. 5-9, Feb. 20 to Apr. 30, May 28 to June 25, and July 1 to Sept. 30. Records good except for periods of no gage-height record, Oct. 20 to Dec. 3, Dec. 15 to Feb. 3, Feb. 20 to Apr. 28, May 28 to June 25 and July 1 to Sept. 30, and periods with ice effect, Oct. 14, 17-19, Dec. 4-14, Feb. 5-9, and Apr. 29-30, which are poor.

AVERAGE DISCHARGE.--7 years, 48.4 ft^3/s, 71.05 in/yr, 35,070 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge recorded, 765 ft^3/s, revised, July 11, 1980, gage height, 8.05 ft, from rating curve extended above 240 ft^3/s on basis of slope-area measurement at gage height, 8.53 ft, for flood of Oct. 10, 1986, but probably was more during period of no gage-height record, Aug. 10-12, 1980; maximum gage height recorded, 12.36 ft, May 25, 1985, backwater from snow and ice; minimum daily discharge, about 1.1 ft^3/s, Mar. 28 to Apr. 10, 1986.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Aug. 25	Unknown	*329	*a7.38	No other peak greater than base discharge.			

a From recorded range in stage.

Minimum daily discharge, about 1.1 ft^3/s, Mar. 28 to Apr. 10.

REVISIONS.--Some peak discharges reported for water year 1980 and the annual maximum (*) reported for water years 1981, 1982, and 1984 have been revised as shown in the following table. They supersede figures published in the reports for 1982 and 1984.

Water year	Date	Time	Discharge (ft^3/s)	Gage height (ft)
1980	July 11, 1980	2200	765	8.05
1980	Sept.26, 1980	1530	610	7.87
1981	July 15, 1981	2200	*550	7.78
1982	Sept.15, 1982	1900	*735	8.01
1984	Aug. 19, 1984	1430	*636	7.90

15239050 BRADLEY RIVER TRIBUTARY NEAR HOMER--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	82	9.5	6.0	5.0	3.5	1.4	1.1	11	42	203	100	130
2	63	9.5	6.0	5.0	3.5	1.4	1.1	9.4	40	180	100	120
3	52	9.0	6.0	4.5	4.0	1.4	1.1	8.8	40	160	150	120
4	45	9.0	6.0	4.5	4.0	1.4	1.1	8.1	42	140	130	110
5	37	8.5	6.0	4.5	4.0	1.4	1.1	9.1	48	130	110	110
6	35	8.5	6.0	4.5	3.5	1.4	1.1	12	54	120	100	110
7	31	8.0	5.5	4.5	3.5	1.4	1.1	12	60	110	90	140
8	34	8.0	5.5	4.5	8.0	1.4	1.1	11	66	110	140	120
9	32	7.5	5.5	4.5	15	1.4	1.1	9.1	70	100	130	100
10	27	7.5	5.5	4.0	17	1.4	1.1	7.4	72	95	130	90
11	26	7.5	5.5	4.0	5.6	1.4	1.2	6.7	74	95	120	80
12	24	7.0	5.5	4.0	2.9	1.4	1.2	6.1	76	95	120	72
13	22	7.0	5.5	4.0	2.7	1.4	1.3	7.4	82	90	120	68
14	20	7.0	5.5	4.0	2.7	1.4	1.4	8.5	90	90	110	64
15	20	6.5	5.5	4.0	2.7	1.3	1.6	7.8	130	90	110	64
16	19	6.5	5.5	4.0	2.7	1.3	1.8	7.4	180	120	100	64
17	17	6.5	5.5	3.5	2.5	1.3	2.0	7.4	210	100	120	60
18	16	6.5	5.5	3.5	2.5	1.3	2.0	10	170	95	110	60
19	15	6.5	5.5	3.5	2.5	1.3	2.2	14	140	95	100	60
20	14	6.5	5.5	3.5	2.4	1.3	2.6	18	120	95	95	110
21	14	6.5	5.5	3.5	2.2	1.3	3.0	21	100	95	90	95
22	13	6.5	5.5	3.5	2.0	1.2	3.0	29	84	130	90	80
23	13	6.0	5.5	3.5	2.0	1.2	3.5	31	80	220	140	70
24	12	6.0	5.5	3.5	1.8	1.2	3.5	38	76	180	190	64
25	11	6.0	5.5	3.0	1.6	1.2	4.0	45	70	130	270	60
26	11	6.0	5.0	3.0	1.6	1.2	4.5	43	96	120	250	56
27	11	6.0	5.0	3.0	1.6	1.2	5.0	45	110	110	260	54
28	11	6.0	5.0	3.0	1.6	1.1	6.0	46	122	110	200	52
29	10	6.0	5.0	3.0	---	1.1	8.1	48	147	110	170	50
30	10	6.0	5.0	3.5	---	1.1	10	46	176	100	140	50
31	10	---	5.0	3.5	---	1.1	---	44	---	100	130	---
TOTAL	757	213.5	170.5	119.5	109.6	40.3	78.9	627.2	2867	3718	4215	2483
MEAN	24.4	7.12	5.50	3.85	3.91	1.30	2.63	20.2	95.6	120	136	82.8
MAX	82	9.5	6.0	5.0	17	1.4	10	48	210	220	270	140
MIN	10	6.0	5.0	3.0	1.6	1.1	1.1	6.1	40	90	90	50
CFSM	2.64	.77	.60	.42	.42	.14	.28	2.18	10.3	13.0	14.7	8.95
IN.	3.04	.86	.69	.48	.44	.16	.32	2.52	11.53	14.95	16.95	9.98
AC-FT	1500	423	338	237	217	80	156	1240	5690	7370	8360	4930

CAL YR 1985 TOTAL 14182.0 MEAN 38.9 MAX 256 MIN 1.9 CFSM 4.21 IN 57.03 AC-FT 28130
WTR YR 1986 TOTAL 15399.5 MEAN 42.2 MAX 270 MIN 1.1 CFSM 4.56 IN 61.92 AC-FT 30540

15239070 BRADLEY RIVER NEAR TIDEWATER NEAR HOMER

LOCATION.--Lat 59°48'06", long 150°52'58", in SE¼NE¼ sec.30, T.4 S., R.9 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on right bank 0.7 mi upstream from mouth, 0.8 mi downstream from Bradley River Tributary, and 25 mi east of Homer.

DRAINAGE AREA.--82 mi², approximately.

PERIOD OF RECORD.--May 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 25 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Nov. 2 to Feb. 4 and Feb. 7 to Apr. 30. Records good below 600 ft³/s and fair above, except for periods of no gage-height record, Nov. 2 to Feb. 4 and Feb. 8 to Apr. 30, and period with ice effect, Feb. 7, which are poor. Flow occasionally affected by high tides.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,160 ft³/s, Aug. 28, 1986, gage height, 10.32 ft; minimum recorded, 33 ft³/s, Apr. 14, 1985, but may have been less during period of ice effect, Feb. 21 to Apr. 14, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,160 ft³/s, Aug. 28, gage height, 10.32 ft; minimum daily, about 40 ft³/s, Apr. 16-18 and 23-26.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1610	97	70	110	95	75	55	207	839	1230	1220	2110
2	1260	95	65	110	95	75	55	225	760	1300	1230	1720
3	953	90	65	100	95	75	55	221	780	1360	1540	1430
4	740	90	65	100	95	75	55	217	917	1430	1960	1190
5	603	85	65	95	87	75	55	222	888	1460	1860	1020
6	520	85	65	95	104	70	50	255	781	1480	1550	919
7	467	85	65	90	110	70	50	270	738	1490	1320	941
8	486	85	65	90	100	70	50	287	827	1450	1430	1320
9	460	85	65	90	105	70	50	267	795	1390	1690	1400
10	405	80	65	85	120	70	50	252	739	1340	1700	1270
11	369	80	200	85	110	70	45	241	700	1420	1570	1110
12	335	80	190	85	100	70	45	244	631	1480	1480	967
13	300	80	180	85	100	70	45	264	593	1390	1300	862
14	275	80	160	95	100	70	45	285	621	1250	1140	781
15	261	80	150	120	100	70	45	297	717	1250	1020	769
16	244	80	130	100	90	65	40	297	930	1230	936	883
17	225	80	120	100	90	65	40	309	1090	1210	895	970
18	205	80	110	100	90	65	40	338	1120	1350	872	1000
19	183	75	100	100	85	65	45	372	1080	1490	813	989
20	180	75	100	100	85	65	45	405	1120	1700	785	1120
21	167	75	95	100	85	65	45	438	1010	1700	780	1120
22	151	75	90	95	85	65	45	493	945	1770	839	1060
23	137	75	200	95	80	60	40	531	918	1870	928	960
24	127	75	180	95	80	60	40	588	845	1740	1010	787
25	125	75	160	95	80	60	40	665	801	1560	1120	645
26	118	150	150	95	80	60	40	688	817	1460	1860	563
27	118	130	140	95	75	60	60	728	856	1460	3550	503
28	114	100	130	95	75	60	90	753	911	1450	3820	458
29	107	85	130	95	---	60	130	817	1010	1400	2690	434
30	100	75	120	95	---	55	195	867	1090	1350	2160	431
31	97	---	120	95	---	55	---	868	---	1270	2270	---
TOTAL	11442	2582	3610	2985	2596	2060	1685	12911	25869	44740	47338	29732
MEAN	369	86.1	116	96.3	92.7	66.5	56.2	416	862	1443	1527	991
MAX	1610	150	200	120	120	75	195	868	1120	1870	3820	2110
MIN	97	75	65	85	75	55	40	207	593	1210	780	431
AC-FT	22700	5120	7160	5920	5150	4090	3340	25610	51310	88740	93890	58970

CAL YR 1985 TOTAL 166004 MEAN 455 MAX 2510 MIN 36 AC-FT 329300
WTR YR 1986 TOTAL 187550 MEAN 514 MAX 3820 MIN 40 AC-FT 372000

15239070 BRADLEY RIVER NEAR TIDEWATER NEAR HOMER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--May to September 1986.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May to August 1986.

INSTRUMENTATION.--Electronic water-temperature recorder since April 1986, set for one-hour recording interval.

REMARKS.--No water temperature record Aug. 12-31, due to recorder malfunction. Records represent water temperatures at the sensor within 0.5°C. No temperature cross sections have been run at this site. Daily intragravel temperatures were collected at this site and published as: 594807150525800, Bradley River Near Tidewater (intragravel) near Homer.

EXTREMES FOR CURRENT PERIOD.--May to August 1986.
WATER TEMPERATURE: Maximum recorded, 10.0°C, Aug. 2, but may have been higher during instrument malfunction, Aug. 12-31; minimum, 0.0°C, May 11.

TEMPERATURE, WATER (DEG. C), MAY TO AUGUST 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1										2.5	1.0	1.5
2										3.0	.5	1.5
3										2.5	1.0	1.5
4										2.5	1.5	2.0
5										4.0	.5	2.0
6										3.5	1.0	2.0
7										3.5	.5	2.0
8										2.5	1.5	2.0
9										2.5	1.0	1.5
10										2.0	1.0	1.5
11										3.0	.0	1.5
12										4.5	1.0	2.5
13										3.0	1.0	2.0
14										3.0	1.5	2.0
15										3.5	1.0	2.0
16										3.0	1.0	2.0
17										4.0	1.5	2.5
18										4.5	1.5	2.5
19										5.0	1.0	2.5
20										4.0	1.0	2.5
21										4.5	1.0	2.5
22										4.5	1.5	2.5
23										4.5	1.5	2.5
24										5.0	1.5	2.5
25										4.5	2.0	3.0
26										4.0	2.0	3.0
27										4.0	2.0	3.0
28										5.0	2.5	3.5
29										5.5	2.0	3.5
30										4.0	2.5	3.0
31										4.0	2.5	3.0
MONTH										5.5	.0	2.5

15239070 BRADLEY RIVER NEAR TIDEWATER NEAR HOMER--Continued

TEMPERATURE, WATER (DEG. C), MAY TO AUGUST 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1	4.0	2.5	3.0	6.5	6.0	6.0	9.5	8.5	9.0			
2	3.5	2.5	3.0	6.5	5.5	6.0	10.0	8.5	9.0			
3	4.0	3.0	3.5	7.5	5.5	6.0	9.0	8.5	9.0			
4	3.5	3.0	3.0	8.0	6.0	6.5	9.5	8.5	9.0			
5	4.5	3.0	3.5	7.0	6.0	6.5	9.0	8.5	8.5			
6	4.0	2.5	3.5	7.0	6.5	6.5	9.5	8.0	8.5			
7	5.5	3.5	4.0	7.5	6.0	6.5	9.0	8.5	8.5			
8	4.0	3.5	3.5	7.5	6.0	6.5	9.0	8.0	8.5			
9	5.0	3.0	4.0	7.5	6.5	7.0	9.0	8.5	8.5			
10	6.0	3.5	4.5	7.5	6.0	6.5	9.0	8.5	8.5			
11	5.5	3.5	4.5	7.5	6.0	6.5	8.5	8.0	8.5			
12	5.0	3.5	4.5	7.5	6.0	6.5	---	---	---			
13	5.5	3.0	4.5	7.0	6.0	6.5	---	---	---			
14	5.5	4.0	4.5	9.5	6.0	7.5	---	---	---			
15	7.5	4.0	5.5	8.5	8.0	8.0	---	---	---			
16	7.0	4.0	5.5	8.0	7.0	7.5	---	---	---			
17	6.5	4.5	5.5	8.0	6.0	7.0	---	---	---			
18	5.5	4.5	5.0	8.0	6.5	7.0	---	---	---			
19	6.5	4.5	5.5	9.0	6.5	7.5	---	---	---			
20	5.0	4.5	5.0	9.0	8.0	8.5	---	---	---			
21	5.5	4.5	5.0	8.5	7.5	8.0	---	---	---			
22	6.5	4.5	5.5	9.0	8.0	8.5	---	---	---			
23	6.0	4.5	5.5	9.0	8.0	8.5	---	---	---			
24	5.5	4.5	5.0	8.5	7.0	8.0	---	---	---			
25	7.0	5.0	6.0	8.0	7.0	7.5	---	---	---			
26	7.0	5.0	5.5	8.5	7.0	8.0	---	---	---			
27	7.5	5.0	6.0	8.5	6.5	7.0	---	---	---			
28	6.5	5.5	6.0	9.5	7.0	8.0	---	---	---			
29	7.0	5.5	6.0	9.5	8.0	8.5	---	---	---			
30	8.0	5.5	6.5	9.5	8.0	9.0	---	---	---			
31	---	---	---	9.5	8.5	9.0	---	---	---			
MONTH	8.0	2.5	5.0	9.5	5.5	7.5						

594807150525800 BRADLEY RIVER NEAR TIDEWATER (INTRAGRAVEL) NEAR HOMER

LOCATION.--Lat 59°48'06", long 150°52'58", in SE¼NE¼ sec. 30, T.4 S., R.9 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on right bank 0.7 mi upstream from mouth, 0.6 mi downstream from Bradley River Tributary, and 25 mi east of Homer.

DRAINAGE AREA.--82 mi^2, approximately.

PERIOD OF RECORD.--May to September 1986.

PERIOD OF DAILY RECORD.--
INTRAGRAVEL TEMPERATURE: May to September 1986.

INSTRUMENTATION.--Electronic water temperature recorder since April 1986, set for one-hour recording interval. Probe is housed in a one-inch by fourteen-inch steel gravel point driven one foot into streambed.

REMARKS.--No intragravel temperature record June 27-28, due to recorder malfunction. Records represent intragravel temperatures at the sensor within 0.5°C. No mechanism is provided to calibrate sensor while in place. Daily water temperatures were collected at this site and published as: 15239070 BRADLEY RIVER NEAR TIDEWATER NEAR HOMER.

EXTREMES FOR CURRENT PERIOD.--MAY TO SEPTEMBER 1986.
INTRAGRAVEL TEMPERATURE: Maximum recorded, 9.0°C, July 29 to Aug. 4, Aug. 6, 20-21, 24; minimum recorded, 0.5°C, May 2, 11.

TEMPERATURE, WATER (DEG. C), MAY TO SEPTEMBER 1986
SAMPLING DEPTH 1.00(FT.),

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			2.5	1.5	3.5	2.5	6.5	6.0	9.0	8.5	8.5	8.0
2			2.5	.5	3.5	3.0	6.5	5.5	9.0	8.5	8.5	8.0
3			2.5	1.0	3.5	3.0	7.0	5.5	9.0	8.5	8.5	8.0
4			2.0	1.5	3.5	3.0	7.0	6.0	9.0	8.5	8.5	8.0
5			3.0	1.0	4.0	3.0	6.5	6.0	8.5	8.5	8.0	7.5
6			3.0	1.0	3.5	3.0	6.5	6.0	9.0	8.0	8.5	8.0
7			2.5	1.0	4.5	3.5	7.0	6.0	8.5	8.5	8.5	8.0
8			2.5	1.5	4.0	3.5	7.0	6.0	8.5	8.5	8.0	7.5
9			2.5	1.5	4.5	3.0	7.0	6.5	8.5	8.5	7.5	7.0
10			1.5	1.5	5.0	3.5	7.0	6.0	8.5	8.5	7.5	7.0
11			2.5	.5	5.0	3.5	7.0	6.0	8.5	8.0	7.5	7.0
12			3.5	1.0	4.5	4.0	7.0	6.0	8.5	8.0	7.5	7.0
13			2.5	1.5	5.0	3.5	7.0	6.5	8.0	7.5	7.5	7.0
14			2.5	1.5	5.0	4.0	8.5	6.0	8.0	7.5	8.0	7.0
15			3.0	1.5	6.5	4.5	8.0	7.5	8.0	7.5	8.0	7.5
16			2.5	1.5	6.5	4.5	7.5	7.0	8.0	7.5	8.0	8.0
17			3.5	1.5	6.0	5.0	7.5	6.5	8.5	7.0	8.0	8.0
18			3.5	2.0	5.5	4.5	7.5	6.5	8.5	8.0	8.0	7.5
19			4.0	1.5	6.0	4.5	8.0	6.5	8.5	8.0	8.0	7.5
20			3.5	1.5	5.5	4.5	8.5	7.5	9.0	8.0	8.0	8.0
21			3.5	1.5	5.0	4.5	8.0	7.5	9.0	8.0	8.0	7.5
22			3.5	1.5	5.5	4.5	8.5	8.0	8.5	8.0	7.5	7.5
23			4.0	2.0	5.5	5.0	8.5	8.0	8.5	7.5	7.5	7.0
24			4.0	2.0	5.5	5.0	8.0	7.5	9.0	8.0	7.0	6.5
25			4.0	2.0	6.5	5.0	8.0	7.0	8.5	8.5	6.5	6.0
26			3.5	2.5	6.0	5.0	8.0	7.5	8.5	8.5	6.5	6.0
27			3.5	2.0	---	---	8.0	7.0	8.5	8.5	6.5	6.5
28			4.5	2.5	---	---	8.5	7.0	8.5	8.5	7.0	6.5
29			4.5	2.5	6.5	---	9.0	8.0	8.5	8.0	7.0	7.0
30			3.5	3.0	7.0	5.5	9.0	8.0	8.5	8.0	7.0	7.0
31			3.5	3.0	---	---	9.0	8.0	8.0	8.0	---	---
MONTH			4.5	.5	7.0	2.5	9.0	5.5	9.0	7.0	8.5	6.0

15239500 FRITZ CREEK NEAR HOMER

LOCATION.--Lat. 59°42'30", long 151°20'35", in SW¼SW¼ sec.28, T.5 S., R.12 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on right bank at downstream side of Homer East Road crossing and 9 miles northeast of Homer.

DRAINAGE AREA.--10.4 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--Annual maximum, water years 1963-85. October 1985 to September 1986.

GAGE.--Water-stage recorder. Elevation of gage is 200 ft above National Geodetic Vertical Datum of 1929, from topographic map. May 28, 1963 to Sept. 30, 1970, crest-stage gage 200 ft upstream at different datum Oct. 1, 1970 to Sept. 30, 1985, crest-stage gage at different datum and slightly different site as prior gage.

REMARKS.--Estimated daily discharges: Oct. 19, 20, 23-29, Nov. 2 to Dec. 3, Dec. 5-8, 11-15, Dec. 19 to Jan. 10, Jan. 16 to Feb. 13, Feb. 16 to Mar. 12, Apr. 3, 4, and Apr. 7-25. Records good except those from May 1 to June 24, which are fair, and for periods with ice effect, Oct. 19, 20, 23-29, Nov. 2 to Dec. 3, Dec. 5-8, 11-15, Dec. 19 to Jan. 10, Jan. 16 to Feb. 13, Feb. 16 to Mar. 12, Apr. 3, 4, and 7-25, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 852 ft³/s, Oct. 22, 1980, gage height, 18.53 ft, site and datum then in use; minimum observed, 0.85 ft³/s, Jan. 13, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 145 ft³/s, Sept. 20, gage height, 11.02 ft.; minimum daily, about 2.6 ft³/s, Mar. 1-7 and Apr. 11-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	21	4.2	4.6	4.0	5.6	2.6	3.3	26	15	6.2	6.0	14
2	17	4.0	4.2	4.0	6.0	2.6	3.3	21	13	6.0	5.6	11
3	13	4.0	3.6	8.0	5.8	2.6	3.3	20	12	6.0	5.5	9.4
4	13	3.8	3.3	12	5.6	2.6	3.2	24	12	5.8	5.6	8.1
5	11	3.8	4.3	20	5.7	2.6	3.2	23	12	5.4	5.4	8.0
6	11	3.8	3.8	17	8.7	2.6	2.8	19	10	9.8	5.2	7.5
7	11	3.6	3.4	15	12	2.6	2.9	15	10	11	4.9	12
8	28	3.6	3.0	13	20	2.8	2.9	19	9.9	8.4	5.0	35
9	41	3.6	2.8	11	14	2.8	2.8	23	9.9	6.9	5.1	28
10	28	3.6	4.7	9.6	11	3.0	2.7	25	9.3	6.4	6.2	17
11	21	3.4	13	9.2	9.0	3.7	2.6	30	8.5	5.8	6.1	13
12	16	3.4	10	9.1	8.0	3.4	2.6	29	8.1	5.4	6.1	12
13	14	3.4	8.6	9.6	7.0	3.6	2.6	24	7.8	5.2	5.9	11
14	12	3.4	7.8	8.8	6.0	3.6	2.6	31	7.8	4.9	5.2	9.9
15	16	3.4	7.0	7.9	5.6	4.0	2.6	23	7.8	4.9	13	9.4
16	22	3.4	6.6	7.0	6.0	3.6	2.7	19	7.5	5.5	24	14
17	16	3.4	5.5	6.8	5.5	3.5	2.8	17	7.5	6.1	12	22
18	12	3.4	5.0	6.8	5.0	4.1	3.0	15	7.5	5.2	11	19
19	12	3.4	4.8	6.6	4.5	3.7	3.5	14	7.5	4.9	12	18
20	11	3.4	4.6	6.4	4.2	3.4	4.5	14	7.2	4.7	9.0	49
21	11	3.2	4.4	6.4	3.8	3.4	5.0	14	6.9	4.6	7.5	49
22	10	3.2	4.4	6.2	3.5	3.7	6.0	13	7.9	15	7.0	42
23	9.5	3.2	4.6	6.0	3.2	3.6	8.0	12	7.2	36	9.6	42
24	9.0	3.2	4.8	6.0	3.0	4.0	11	12	6.7	17	14	32
25	8.0	3.2	5.0	6.0	3.0	4.2	15	12	6.5	13	14	29
26	7.0	15	4.8	6.0	2.8	3.8	20	21	6.4	24	13	26
27	6.5	10	4.6	5.8	2.8	3.4	28	34	6.1	13	15	28
28	6.0	8.0	4.4	5.6	2.8	3.2	40	26	6.0	9.2	14	25
29	5.4	6.6	4.2	5.6	---	3.0	40	23	6.1	7.4	11	22
30	5.0	5.4	4.0	5.6	---	2.9	41	20	6.4	6.6	12	21
31	4.5	---	4.0	5.6	---	3.0	---	17	---	6.3	14	---
TOTAL	427.9	133.0	159.8	256.6	180.1	101.1	273.9	635	256.5	276.6	289.9	643.3
MEAN	13.8	4.43	5.15	8.28	6.43	3.26	9.13	20.5	8.55	8.92	9.35	21.4
MAX	41	15	13	20	20	4.2	41	34	15	36	24	49
MIN	4.5	3.2	2.8	4.0	2.8	2.6	2.6	12	6.0	4.6	4.9	7.5
CFSM	1.33	.43	.50	.80	.62	.31	.88	1.97	.82	.86	.90	2.06
IN.	1.53	.48	.57	.92	.64	.36	.98	2.27	.92	.99	1.04	2.30
AC-FT	849	264	317	509	357	201	543	1260	509	549	575	1280

WTR YR 1986 TOTAL 3633.7 MEAN 9.96 MAX 49 MIN 2.6 CFSM .96 IN 13.00 AC-FT 7210

15239500 FRITZ CREEK NEAR HOMER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951, 1962, 1968, 1970-71, 1978-80, 1986.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)
APR												
02...	1015	10.1	3.0	130	7.60	2.0	0.0	10	742	13.8	98	K4
29...	2100	20.8	45	52	6.80	6.5	0.0	30	--	--	--	--
MAY												
01...	0920	19.0	21	--	--	5.0	0.5	--	--	--	--	290
JUN												
24...	1500	16.8	6.6	103	7.20	11.5	6.0	20	--	--	--	K2
AUG												
13...	1200	16.5	6.1	96	7.40	11.5	6.5	20	--	--	--	K2

DATE	TIME	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)
APR											
02...	1015	55	0	12	6.1	6.9	3.0	61	60	74	0
29...	2100	16	0	3.4	1.8	2.9	1.9	20	20	24	0
JUN											
24...	1500	31	0	6.8	3.5	5.5	2.1	38	38	46	0
AUG											
13...	1200	34	0	7.4	3.7	5.9	1.8	39	39	48	0

DATE	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	BROMIDE DIS-SOLVED (MG/L AS BR) (71870)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	ARSENIC TOTAL (UG/L AS AS) (01002)	BARIUM, TOTAL RECOV-ERABLE (UG/L AS BA) (01007)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)
APR											
02...	12	5.2	<0.10	0.013	36	120	0.570	0.040	2	<100	<10
29...	6.5	3.2	<0.10	0.019	13	45	0.140	0.040	6	100	<10
JUN											
24...	5.5	5.6	<0.10	<0.010	26	78	0.240	0.050	2	<100	<10
AUG											
13...	5.7	3.8	<0.10	<0.010	28	80	0.200	0.050	2	<100	<10

DATE	BORON, DIS-SOLVED (UG/L AS B) (01020)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
APR											
02...	--	<1	6	290	4	53	<0.10	<1	<1	13	0.11
29...	--	<1	32	540	4	61	<0.10	<1	<1	504	61
JUN											
24...	<10	1	9	460	<5	350	<0.10	<1	<1	--	--
AUG											
13...	--	<1	4	460	<5	26	0.10	<1	<1	56	0.92

K NON-IDEAL COLONY COUNT

15239900 ANCHOR RIVER NEAR ANCHOR POINT

LOCATION.--Lat 59°44'50", long 151°45'11", in NE¼ sec.13, T.5 S., R.15 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on right bank at downstream side of bridge on Sterling Highway and 4.3 mi southeast of Anchor Point.

DRAINAGE AREA.--137 mi².

PERIOD OF RECORD.--June 1965 to September 1973 and annual maximum, water year 1974. September 1978 to October 1986 (discontinued).

REVISED RECORDS.--WSP 2136: 1965 (M). WDR AK-79-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 168.64 ft above National Geodetic Vertical Datum of 1929. Prior to June 5, 1981, on left bank at same datum.

REMARKS.--Estimated daily discharges: Oct. 25 to Apr. 30. Records good except for periods with ice effect, Oct. 25, Dec. 5-7, and Feb. 5 to Apr. 30, and periods of no gage-height record, Oct. 26 to Dec. 4 and Dec. 8 to Feb. 4, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--16 years (water years 1966-73 and 1979-86), 202 ft³/s, 20.02 in/yr, 146,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 6,050 ft³/s, Nov. 29, 1983, gage height, 7.42 ft, from rating curve extended above 3,100 ft³/s; maximum gage height, 10.86 ft at former site, Dec. 3, 1978, backwater from ice; minimum daily discharge, about 28 ft³/s, Jan. 1-31, 1969.

EXTREMES FOR CURRENT PERIOD.--Peak discharges above base of 800 ft³/s and annual maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Feb. 9, 1986	1600	(a)	*6.02	Oct. 10, 1986	1230	2,210	5.17
Apr. 27, 1986	----	Unknown	ice jam	Oct. 13, 1986	0700	1,730	4.72
Sept.20, 1986	1130	*1,940	4.93	Oct. 15, 1986	0530	1,760	4.75

(a) Backwater from ice.
Minimum daily discharge, about 50 ft³/s, Mar. 6-8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	287	90	85	60	90	55	85	671	222	112	110	207
2	249	85	78	60	90	55	82	522	204	110	105	165
3	216	85	72	60	90	55	80	448	197	111	102	142
4	199	85	68	100	90	55	78	492	192	104	105	128
5	184	85	65	150	90	55	78	433	185	100	103	122
6	180	85	65	130	90	50	76	409	175	112	99	117
7	202	85	65	120	90	50	76	343	168	149	97	171
8	477	85	65	110	95	50	76	370	166	128	106	419
9	650	85	72	110	110	55	78	395	165	117	108	354
10	388	80	93	110	110	55	85	379	167	109	120	219
11	293	80	120	110	100	60	95	402	159	100	123	178
12	244	80	110	100	100	60	110	538	150	97	124	159
13	215	80	100	100	95	65	120	491	144	92	120	148
14	190	80	90	100	90	70	150	479	140	89	105	140
15	220	80	84	100	90	75	190	387	141	88	150	133
16	284	80	76	95	85	75	230	355	137	113	327	150
17	237	80	68	95	80	80	270	324	131	123	189	214
18	197	80	66	95	75	85	320	327	131	102	157	204
19	144	75	64	95	75	90	400	351	131	91	178	183
20	143	75	64	90	70	95	520	292	129	86	147	1540
21	164	75	65	90	70	95	480	296	124	85	129	784
22	156	75	65	90	65	95	460	255	137	130	119	503
23	123	75	70	90	65	90	450	227	140	508	132	553
24	95	75	70	90	65	90	550	217	131	250	221	371
25	95	75	75	90	60	90	700	217	123	177	205	301
26	90	110	75	90	60	90	850	255	119	264	204	263
27	90	150	75	90	60	85	1100	394	116	192	197	301
28	90	130	70	90	60	85	1000	434	112	148	189	278
29	90	110	70	90	---	85	900	326	114	129	159	253
30	90	95	65	90	---	85	800	270	117	116	171	246
31	90	---	65	90	---	85	---	243	---	113	181	---
TOTAL	6372	2610	2335	2980	2310	2265	10489	11542	4467	4245	4582	8946
MEAN	206	87.0	75.3	96.1	82.5	73.1	350	372	149	137	148	298
MAX	650	150	120	150	110	95	1100	671	222	508	327	1540
MIN	90	75	64	60	60	50	76	217	112	85	97	117
CFSM	1.50	.64	.55	.70	.60	.53	2.56	2.72	1.09	1.00	1.08	2.18
IN.	1.73	.71	.63	.81	.63	.62	2.85	3.13	1.21	1.15	1.24	2.43
AC-FT	12640	5180	4630	5910	4580	4490	20800	22890	8860	8420	9090	17740

CAL YR 1985 TOTAL 75017 MEAN 206 MAX 1600 MIN 60 CFSM 1.50 IN 20.37 AC-FT 148800
WTR YR 1986 TOTAL 63143 MEAN 173 MAX 1540 MIN 50 CFSM 1.26 IN 17.15 AC-FT 125200

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1986
MEAN VALUES

DAY	OCT	DAY	OCT	DAY	OCT	DAY	OCT	DAY	OCT	DAY	OCT
1	248	6	249	11	1530	16	815	21	383	26	257
2	250	7	233	12	859	17	572	22	374	27	228
3	400	8	224	13	1450	18	479	23	334	28	215
4	443	9	233	14	817	19	433	24	302	29	208
5	299	10	1720	15	1510	20	390	25	275	30	185
										31	198

OCTOBER TOTAL - 16113 MEAN - 520 MAX - 1720 MIN - 185 CFSM - 3.80 IN. - 4.38 AC-FT - 31960

15258000 KENAI RIVER AT COOPER LANDING

LOCATION.--Lat 60°29'34", long 149°48'28", in SE¼ sec.28, T.5 N., R.3 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, Chugach National Forest, on right bank 10 ft downstream of bridge on Sterling Highway, 0.9 mi east (upstream) of Cooper Landing, Bean Creek, and at Kenai Lake outlet.

DRAINAGE AREA.--634 mi^2.

PERIOD OF RECORD.--May 1947 to current year.

REVISED RECORDS.--WSP 2136: 1964 (M).

GAGE.--Water-stage recorder. Datum of gage is 419.92 ft above National Geodetic Vertical Datum of 1929, (levels by Alaska Department of Transportation). See WSP 2136 for history of changes prior to Aug. 28, 1965. Aug. 28, 1965 to Jan. 21, 1974 at site 10 ft upstream at present datum. Jan. 22, 1974 to Sept. 30, 1981, nonrecording gage at site 40 ft upstream at present datum.

REMARKS.--Estimated daily discharges: Sept. 8-12. Records good. Diversion from Cooper Lake to Kenai Lake above gage through Cooper Lake powerplant began May 1961. Satellite telemetry installed Feb. 15, 1983.

COOPERATION.--Records of diversion provided by Chugach Electric Association.

AVERAGE DISCHARGE.--39 years, 2,809 ft^3/s, 60.17 in/yr, 2,035,000 acre-ft/yr, adjusted to exclude diversion from Cooper Lake.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 23,100 ft^3/s, Sept. 21, 1974, gage height, 17.18 ft, result of release of stored water from glacier-dammed lake at head of unnamed glacier in the Snow River basin; no flow Mar. 27, 28, 1964, caused by earthquake.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,230 ft^3/s, Dec. 3, gage height, 11.75 ft, result of release from glacier-dammed lake at head of unnamed glacier in Snow River basin; minimum, 425 ft^3/s, Apr. 19.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5320	1430	4900	2400	1010	826	521	491	3890	5680	6100	6370
2	5180	1360	6460	2260	1010	819	515	516	4060	5910	5860	6060
3	4950	1320	7880	2200	990	801	506	549	4150	6070	5840	5760
4	4680	1310	7730	2300	965	791	501	571	4150	6310	5980	5410
5	4410	1290	6620	2260	958	783	485	613	4130	6560	6060	5100
6	4160	1250	5530	2200	977	773	482	656	4090	6720	6050	4820
7	3930	1210	4690	2110	1030	760	474	701	4170	6870	5880	4610
8	3800	1210	4090	2040	1120	747	478	747	4540	6940	5760	4600
9	3620	1220	3670	1910	1180	730	477	781	4870	6890	5900	4550
10	3450	1220	3200	1890	1190	722	473	813	4980	6780	5980	4500
11	3310	1180	3080	1800	1170	701	462	848	4970	6780	6020	4450
12	3180	1150	2930	1750	1150	694	466	907	4900	6910	6030	4400
13	3030	1110	2730	1650	1130	676	457	999	4810	7010	5910	4230
14	2900	1090	2540	1620	1110	659	459	1120	4770	7090	5700	4050
15	2810	1090	2350	1590	1090	646	448	1210	4850	7090	5450	3920
16	2680	1090	2160	1530	1060	637	444	1290	5240	6980	5140	3820
17	2560	1080	2030	1470	1030	624	443	1360	5710	6870	4910	3830
18	2450	1080	1930	1440	1010	609	441	1410	6050	6880	4740	3840
19	2340	1080	1850	1410	979	593	435	1460	6350	7020	4550	3840
20	2270	1090	1840	1370	960	582	434	1530	6510	7290	4330	3890
21	2170	1140	1930	1310	949	576	439	1630	6500	7400	4160	3940
22	2080	1150	2040	1280	928	568	441	1760	6460	7490	4010	3910
23	1980	1180	2390	1250	910	555	453	1880	6370	7650	3960	3720
24	1900	1250	2840	1210	886	548	453	2020	6180	7700	3950	3620
25	1830	1360	3100	1180	888	545	457	2200	5940	7590	3950	3440
26	1740	1590	3140	1150	881	539	448	2350	5660	7360	4220	3290
27	1690	1770	3040	1140	861	541	449	2570	5520	7220	5240	3100
28	1620	2110	2920	1110	846	535	459	2780	5490	7090	6310	2920
29	1580	2680	2790	1080	---	525	467	3030	5470	6920	6760	2780
30	1530	3560	2660	1080	---	522	479	3280	5510	6690	6730	2650
31	1480	---	2530	1050	---	520	---	3590	---	6390	6560	---
TOTAL	90630	41650	107540	50040	28268	20147	13946	45662	156290	214150	168040	125420
MEAN	2924	1388	3469	1614	1010	650	465	1473	5210	6908	5421	4181
MAX	5320	3560	7880	2400	1190	826	521	3590	6510	7700	6760	6370
MIN	1480	1080	1840	1050	846	520	434	491	3890	5680	3950	2650
AC-FT	179800	82610	213300	99250	56070	39960	27660	90570	310000	424800	333300	248800

CAL YR 1985 TOTAL 1012617 MEAN 2775 MAX 8360 MIN 350 AC-FT 2009000
WTR YR 1986 TOTAL 1061783 MEAN 2909 MAX 7880 MIN 434 AC-FT 2106000

ADJUSTED TO EXCLUDE DIVERSION FROM COOPER LAKE

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	2720	1197	3291	1461	838	516	351	1408	5200	6883	5405	4124
CFSM	4.29	1.89	5.19	2.30	1.32	0.81	0.55	2.22	8.20	10.86	8.52	6.50
IN	4.95	2.11	5.98	2.66	1.38	0.94	0.62	2.56	9.15	12.52	9.83	7.26
AC-FT	167300	71230	202400	89830	46550	31740	20860	86570	309300	423200	332300	245400

CAL YR 1985 MEAN 2662 CFSM 4.20 IN. 56.99 AC-FT 1,927,000
CAL YR 1986 MEAN 2799 CFSM 4.42 IN. 59.93 AC-FT 2,027,000

15266300 KENAI RIVER AT SOLDOTNA

LOCATION.--Lat 60°28'39", long 151°04'46", Kenai Peninsula Borough, Hydrologic Unit 19050002, near center of span on downstream side of bridge on Sterling Highway, 1.0 mi southwest of Soldotna.

DRAINAGE AREA.--2,010 mi^2.

PERIOD OF RECORD.--May 1965 to current year.

GAGE.--Nonrecording gage. Datum of gage is 35.34 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Nov. 19-25, 27, Nov. 29 to Dec. 6, Jan. 17 to Mar. 28, Mar. 30 to Apr. 4, Apr. 7-14, Aug. 8-10, 12, 14-25, Aug. 27 to Sept. 4, and Sept. 7-11. Records good except for periods of no gage-height, Feb. 1 to Mar. 24, Aug. 8-10, 12, 14-25, Aug. 27 to Sept. 4, and Sept. 7-11, and periods of ice effect, Nov. 19-25, 27, Nov. 29 to Dec. 6, Jan. 17-31, Mar. 25-28, Mar. 30 to Apr. 4, and Apr. 7-14, which are poor.

AVERAGE DISCHARGE.--21 years, 5,834 ft^3/s, 39.41 in/yr, 4,227,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 33,700 ft^3/s, Sept. 9, 1977, gage height, 13.45 ft, from graph based on gage readings; maximum gage height, 22.62 ft, Jan. 18, 1969, backwater from ice; minimum daily discharge, 770 ft^3/s, Apr. 1-4, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15,500 ft^3/s, July 26-29, gage height, 10.08 ft; minimum daily, about 1,250 ft^3/s, Apr. 9-10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9210	4050	2100	4290	2250	1950	1400	2040	5470	10700	14900	14700
2	9210	4530	2400	4240	2250	1950	1500	1910	5630	10800	14600	14200
3	9100	5260	2900	4050	2200	1900	1600	2040	5630	11000	14600	13900
4	9030	6410	3900	4560	2200	1900	1550	2060	5830	11100	14900	13600
5	8680	8610	4600	4640	2200	1850	1480	1910	5830	11500	14900	13300
6	8330	11800	4600	4640	2200	1850	1410	1890	5890	11800	14600	12800
7	8060	11500	4620	4540	2250	1800	1350	1970	6060	12200	14400	12300
8	8170	9950	4740	4360	2300	1800	1300	2020	6300	12200	14200	12100
9	7610	8250	4870	4140	2350	1800	1250	2070	6630	12300	14400	11900
10	7350	7200	4800	4140	2400	1800	1250	2140	6780	12400	14600	11700
11	7030	6310	4740	3950	2450	1800	1300	2270	6900	12400	14500	11500
12	6720	5560	4670	3770	2500	1800	1300	2320	7250	12500	14300	11400
13	6450	4960	4490	3680	2500	1800	1320	2360	7250	12900	14000	11000
14	6120	4490	4360	3540	2500	1850	1340	2430	7540	13100	13800	10500
15	5890	4100	4240	3430	2500	1850	1360	2550	7800	13100	13500	9940
16	5750	3720	4140	3300	2450	1900	1370	2580	8060	13500	13200	9710
17	5490	3490	3910	3200	2400	1900	1410	2580	8770	13500	13000	9750
18	5270	3230	3720	3150	2350	1950	1470	2660	9300	13500	12700	9710
19	4950	3200	3770	3100	2300	1950	1550	2760	9460	13700	12500	9530
20	4740	3000	3540	3000	2300	2000	1590	2900	9820	14000	12300	9640
21	4670	2900	3650	2900	2250	2000	1740	3020	10200	14500	12100	9970
22	4590	2800	3630	2800	2200	1950	1630	3190	10200	14600	11900	9710
23	4360	2700	4110	2700	2200	1950	1570	3380	10200	14900	12300	9750
24	4000	2600	4610	2700	2100	1900	1530	3540	10400	15300	11700	9460
25	3880	2500	4490	2600	2100	1850	1550	3770	10500	15300	11000	9030
26	3720	2460	4570	2500	2050	1800	1530	4050	10200	15500	10200	8610
27	3810	2350	4820	2500	2050	1700	1550	4190	10200	15500	10200	8170
28	3810	2230	4640	2400	2000	1600	1550	4410	10200	15500	12000	7730
29	3810	2200	4590	2400	---	1550	1600	4670	10300	15500	14000	7380
30	3880	2100	4390	2300	---	1500	1770	4930	10400	15100	14800	7000
31	4000	---	4390	2300	---	1450	---	5360	---	15100	15000	---
TOTAL	187690	144460	129000	105820	63800	56650	44120	89970	245200	415000	415100	319990
MEAN	6055	4815	4161	3414	2279	1827	1471	2902	8173	13390	13390	10670
MAX	9210	11800	4870	4640	2500	2000	1770	5360	10500	15500	15000	14700
MIN	3720	2100	2100	2300	2000	1450	1250	1890	5470	10700	10200	7000
CFSM	3.01	2.40	2.07	1.70	1.13	.91	.73	1.44	4.07	6.66	6.66	5.31
IN.	3.47	2.67	2.39	1.96	1.18	1.05	.82	1.67	4.54	7.68	7.68	5.92
AC-FT	372300	286500	255900	209900	126500	112400	87510	178500	486400	823200	823400	634700

CAL YR 1985 TOTAL 1947600 MEAN 5336 MAX 14500 MIN 1000 CFSM 2.66 IN 36.05 AC-FT 3863000
WTR YR 1986 TOTAL 2216800 MEAN 6073 MAX 15500 MIN 1250 CFSM 3.02 IN 41.03 AC-FT 4397000

15267900 RESURRECTION CREEK NEAR HOPE

LOCATION.--Lat 60°53'40", long 149°38'13", in SW¼SE¼ sec.4, T.9 N., R.3 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, Chugach National Forest, on right bank 2.1 mi upstream from mouth on south shore of Turnagain Arm and 1.8 mi south of Hope.

DRAINAGE AREA.--149 mi^2.

PERIOD OF RECORD.--October 1967 to March 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 180 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 3, 1981 at site 300 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 20 to Mar. 31. Records fair except for periods of ice effect, Oct. 20 to Dec. 19 and Feb. 3-4, and the periods of no gage-height record, Dec. 20 to Feb. 2, and Feb. 5 to Mar. 31, which are poor.

AVERAGE DISCHARGE.--18 years (water years 1968-85), 275 ft^3/s, 25.06 in/yr, 199,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,380 ft^3/s, July 12, 1980, gage height, 8.71 ft, site and datum then in use, from rating curve extended above 2,100 ft^3/s; maximum gage height, 8.96 ft, June 18, 1977, site and datum then in use; minimum daily discharge, about 38 ft^3/s, Apr. 1-18, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period October 1985 to March 1986, 460 ft^3/s, Oct. 1 (0230 hrs), gage height, 4.65 ft, stage falling, peak occurred Sept. 28, 1985; maximum independent discharge not determined for the period; maximum gage height, 9.93 ft, Nov. 24, backwater from ice; minimum daily discharge, about 44 ft^3/s, Mar. 29-31.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1985 TO MARCH 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	447	120	100	90	65	55						
2	427	120	100	85	65	50						
3	401	120	95	85	60	50						
4	382	120	95	110	60	50						
5	370	120	95	100	60	50						
6	358	110	95	100	60	50						
7	348	110	95	90	60	50						
8	353	110	95	90	90	50						
9	358	110	95	85	80	50						
10	331	110	95	85	70	50						
11	315	110	90	85	65	50						
12	304	110	90	80	65	50						
13	294	110	90	80	60	50						
14	280	110	90	75	60	50						
15	280	110	90	75	60	50						
16	280	100	90	70	55	48						
17	270	100	90	70	55	48						
18	256	100	90	70	55	48						
19	218	100	85	70	55	48						
20	190	100	90	70	55	48						
21	180	100	90	70	55	48						
22	170	100	95	70	55	46						
23	160	100	95	70	55	46						
24	150	100	100	65	55	46						
25	140	100	100	65	55	46						
26	140	100	100	65	55	46						
27	140	100	95	65	55	46						
28	130	100	95	65	55	46						
29	130	100	95	65	---	44						
30	130	100	90	65	---	44						
31	120	---	90	65	---	44						
TOTAL	8052	3200	2900	2395	1695	1497						
MEAN	260	107	93.5	77.3	60.5	48.3						
MAX	447	120	100	110	90	55						
MIN	120	100	85	65	55	44						
CFSM	1.75	.72	.63	.52	.41	.32						
IN.	2.01	.80	.72	.60	.42	.37						
AC-FT	15970	6350	5750	4750	3360	2970						

CAL YR 1985 TOTAL 89506 MEAN 245 MAX 1190 MIN 38 CFSM 1.64 IN 22.35 AC-FT 177500

15271000 SIXMILE CREEK NEAR HOPE

LOCATION.--Lat 60°49'15", long 149°25'31", in SW¼SE¼ sec.34, T.8 N., R.1 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, Chugach National Forest, on left bank 6.0 mi upstream from mouth at Turnagain Arm and 10.6 mi southeast of Hope.

DRAINAGE AREA.--234 mi².

PERIOD OF RECORD.--June 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 250 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Nov. 26, 1979, recording gage at site 0.8 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 21-23, Oct. 26 to Jan. 28, and Feb. 2 to Apr. 15. Records good except for periods of no gage-height record, Nov. 6 to Jan. 8 and Mar. 3-31 and periods with ice effect, Oct. 21-23, Oct. 26 to Nov. 5, Jan. 9-28, Feb. 2 to Mar. 2, and Apr. 1-15, which are poor. Satellite telemeter at station. Several measurements of water temperature were made during the year.

AVERAGE DISCHARGE.--7 years, 913 ft³/s, 52.95 in/yr, 661,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded discharge, 8,070 ft³/s, July 12, 1980, gage height, 13.22 ft. Peak discharge was probably greater sometime during the period, Nov. 26 to Jan. 9, 1980, during release from storage behind snow-avalanche dam upstream from former gage site; this flood destroyed the gage and reached a stage of about 29.0 ft, site and datum then in use. Minimum daily discharge, about 80 ft³/s, Apr. 1-9, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of October 1969 reached a stage of 20.8 ft, former site and datum, from floodmarks, discharge, 7,300 ft³/s from rating curve extended above 2,500 ft³/s on basis of slope-area measurement at gage height of 17.62 ft.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,500 ft³/s (revised) and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 8	0500	3,620	11.59	June 17	0130	*3,900	*11.73

Minimum daily discharge, about 80 ft³/s, Apr. 1-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	915	270	200	210	174	110	80	310	1950	2430	1030	855
2	852	260	200	200	180	110	80	346	1670	2450	1080	820
3	792	260	200	190	180	110	80	383	1560	2230	1190	779
4	758	250	190	190	180	110	80	385	1420	2260	1200	731
5	707	250	190	190	180	110	80	439	1390	2300	1060	697
6	688	250	190	190	180	110	80	503	1460	2320	966	675
7	673	240	190	190	180	110	80	499	2470	2020	884	671
8	682	240	190	190	170	110	80	488	3290	1890	967	895
9	688	230	190	190	170	110	80	468	2370	1800	1040	793
10	641	230	200	190	160	110	90	481	1950	1780	1020	709
11	607	230	200	190	160	110	100	524	1820	1900	994	672
12	569	220	200	190	150	120	110	584	1850	2070	1050	651
13	549	220	200	190	150	120	120	670	1930	2120	1060	643
14	519	220	190	190	140	120	130	752	2230	1920	944	634
15	514	220	190	190	140	120	140	756	2500	1740	893	637
16	514	210	190	190	140	120	154	700	3240	1630	841	659
17	490	210	190	190	130	120	160	678	3430	1550	804	727
18	471	210	190	190	130	120	163	699	2970	1750	786	700
19	411	210	190	190	130	120	164	770	2890	1810	759	661
20	394	210	190	190	120	120	169	830	2740	2000	740	888
21	380	200	190	190	120	120	172	923	2490	1680	736	901
22	360	200	190	190	120	120	171	1040	2400	1640	755	795
23	340	200	200	190	110	120	167	1120	2250	2150	768	730
24	322	200	210	180	110	120	170	1200	2030	1660	760	658
25	316	200	210	180	110	120	175	1300	1840	1360	773	598
26	310	200	210	180	110	110	179	1310	1850	1570	1030	566
27	300	200	210	180	110	100	193	1470	1980	1450	1280	563
28	290	200	210	180	110	90	216	1630	2130	1320	1090	545
29	290	200	210	182	---	90	249	1820	2070	1250	945	533
30	280	200	210	182	---	85	286	2050	2250	1180	916	533
31	270	---	210	174	---	85	---	2250	---	1110	909	---
TOTAL	15892	6640	6130	5838	4044	3450	4198	27378	66420	56340	29270	20919
MEAN	513	221	198	188	144	111	140	883	2214	1817	944	697
MAX	915	270	210	210	180	120	286	2250	3430	2450	1280	901
MIN	270	200	190	174	110	85	80	310	1390	1110	736	533
CFSM	2.19	.94	.85	.80	.62	.47	.60	3.77	9.46	7.77	4.03	2.98
IN.	2.53	1.06	.97	.93	.64	.55	.67	4.35	10.56	8.96	4.65	3.33
AC-FT	31520	13170	12160	11580	8020	6840	8330	54300	131700	111800	58060	41490

CAL YR 1985 TOTAL 258866 MEAN 709 MAX 4070 MIN 100 CFSM 3.03 IN 41.15 AC-FT 513500
WTR YR 1986 TOTAL 246519 MEAN 675 MAX 3430 MIN 80 CFSM 2.89 IN 39.19 AC-FT 489000

15273050 RABBIT CREEK AT ANCHORAGE

WATER-QUALITY RECORDS

LOCATION.--Lat 61°04'54", long 149°49'30", in SW¼SW¼ sec.33, T.12 N., R.3 W., Municipality of Anchorage, Hydrologic Unit 19050002, on right bank 0.2 mi downstream from Old Seward Highway, 0.5 mi upstream from Little Rabbit Creek, and 9.5 mi south of Anchorage.

PERIOD OF RECORD.--Water year 1979, 1980 and 1983 to March 1986 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: January 1984 to March 1986.
WATER TEMPERATURE: January 1984 to March 1986.

INSTRUMENTATION.--Water-quality monitor and multiparameter electronic recorder since Jan. 1984, set for thirty-minute recording interval.

REMARKS.--Interruptions in record were due to malfunction of the recording instruments. Records represent specific conductance and water temperature at the sensors within 1.0 microsiemens and 0.5°C respectively. No cross-sections were obtained during the year. Unpublished records of daily air temperature are available in the files of the Anchorage subdistrict office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 176 microsiemens, APR. 25, 1985; minimum recorded, 39 microsiemens, Aug. 26, 1984.
WATER TEMPERATURE: Maximum, 12.5°C, Aug. 4, 1984 and Aug. 14, 1985; minimum, 0.0°C, on many days during winter period.

EXTREMES FOR CURRENT PERIOD.--October 1985 to March 1986:
SPECIFIC CONDUCTANCE: Maximum recorded, 145 microsiemens, Dec. 21; minimum recorded, 77 microsiemens, Oct. 1.
WATER TEMPERATURE: Maximum, 6.0°C, Oct. 1-2; minimum, 0.0°C, on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT			
09...	1055	E50	19

E Estimated

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, OCTOBER 1985 TO MARCH 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	79	77	78	101	100	100	110	109	109			
2	80	79	79	101	99	100	110	109	109			
3	81	80	80	101	99	100	110	109	109			
4	82	81	81	111	100	105	109	109	109			
5	82	81	81	118	109	114	108	108	108			
6	84	83	83	117	116	116	108	107	108			
7	88	85	86	119	117	118	108	108	108			
8	90	87	88	119	117	118	108	107	107			
9	94	89	---	119	110	114	109	107	108			
10	94	91	92	115	108	111	110	107	---			
11	93	90	92	115	110	113	---	---	---			
12	91	90	90	112	110	111	---	---	---			
13	91	90	90	---	---	---	---	---	---			
14	92	90	91	---	---	---	110	109	110			
15	---	---	---	---	---	---	111	110	110			
16	---	---	---	---	---	---	111	109	110			
17	---	---	---	---	---	---	111	110	111			
18	95	92	93	---	---	---	111	109	110			
19	95	93	94	113	113	113	132	110	120			
20	97	92	94	113	111	112	143	119	127			
21	94	92	93	112	111	112	145	117	127			
22	96	94	95	112	111	111	131	115	118			
23	99	97	98	112	111	112	137	118	126			
24	99	97	98	111	111	111	128	114	120			
25	100	98	99	111	110	111	115	114	114			
26	99	98	98	111	110	110	114	113	114			
27	99	96	97	111	110	110	120	114	116			
28	96	95	95	111	110	111	124	115	118			
29	98	96	97	111	110	110	116	116	116			
30	98	97	97	110	110	110	---	---	---			
31	100	99	99	---	---	---	---	---	---			
MONTH	100	77	91	119	99	111	145	107	114			

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, OCTOBER 1985 TO MARCH 1986

DAY	FEBRUARY			MARCH			APRIL			MAY		
	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
1	---	---	---	91	89	90						
2	---	---	---	91	90	90						
3	103	102	102	91	90	90						
4	102	100	101	92	91	91						
5	102	100	101	93	92	92						
6	101	97	99	93	92	92						
7	109	97	99	94	93	93						
8	122	97	106	94	93	93						
9	116	99	104	94	92	93						
10	105	97	98	97	93	95						
11	107	100	103	94	93	93						
12	---	---	---	94	93	93						
13	---	---	---	97	94	95						
14	---	---	---	110	95	100						
15	---	---	---	104	95	100						
16	---	---	---	104	95	98						
17	---	---	---	106	97	101						
18	---	---	---	103	96	99						
19	---	---	---	100	94	97						
20	---	---	---	102	96	98						
21	---	---	---	102	96	98						
22	---	---	---	104	96	99						
23	---	---	---	104	97	100						
24	---	---	---	105	97	99						
25	---	---	---	109	97	101						
26	90	88	89	102	100	101						
27	90	88	89	102	100	100						
28	90	88	89	101	100	100						
29	---	---	---	100	99	100						
30	---	---	---	101	99	100						
31	---	---	---	101	99	100						
MONTH				110	89	96						

TEMPERATURE, WATER (DEG. C), OCTOBER 1985 TO MARCH 1986

DAY	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
1	6.0	4.0	.5	.5	.5	.5			---	---	.5	.5
2	6.0	4.0	.5	.5	.5	.5			---	---	.5	.5
3	5.0	3.5	.5	.5	.0	.0			.5	.5	.5	.5
4	4.5	3.0	.5	.5	.0	.0			.5	.0	.5	.5
5	4.0	1.5	.5	.5	.0	.0			.5	.0	.5	.5
6	4.0	3.0	.5	.5	.0	.0			.5	.0	.5	.5
7	5.0	3.5	.5	.5	.0	.0			.0	.0	.5	.5
8	5.5	4.5	.5	.5	.0	.0			.5	.0	.5	.5
9	5.0	3.5	.5	.0	.5	.0			.5	.5	.5	.5
10	4.5	3.5	.5	.0	---	---			.5	.5	.5	.5
11	4.5	2.5	.5	.5	---	---			1.0	.5	.5	.5
12	4.0	2.0	.5	.5	---	---			.5	.0	.5	.5
13	4.0	2.0	.5	.0	---	---			---	---	.5	.0
14	2.0	1.0	.0	.0	.5	.5			---	---	.5	.0
15	---	---	.0	.0	.5	.5			---	---	.5	.0
16	---	---	.0	.0	.5	.5			---	---	.5	.0
17	---	---	.0	.0	.5	.5			---	---	.5	.0
18	1.5	.5	.0	.0	.5	.0			---	---	.5	.0
19	.5	.5	.5	.0	1.0	.5			---	---	.5	.0
20	.5	.5	.5	.0	1.0	1.0			---	---	.5	.0
21	.5	.5	.5	.0	1.0	.5			---	---	.0	.0
22	.5	.5	.5	.5	1.0	1.0			---	---	.5	.0
23	.5	.5	.5	.0	1.0	.5			---	---	.5	.0
24	.5	.5	.5	.0	1.5	1.0			---	---	.5	.0
25	.5	.5	.5	.0	1.0	.5			---	---	.5	.5
26	.5	.5	.5	.5	1.0	.5			.5	.5	.5	.0
27	.5	.5	.5	.5	1.5	1.0			.5	.5	.5	.0
28	.5	.5	.5	.5	1.5	1.0			.5	.5	.5	.0
29	.5	.5	.0	.0	1.0	1.0			---	---	.5	.0
30	.5	.5	.5	.0	1.0	.0			---	---	.0	.0
31	.5	.5	---	---	1.0	---			---	---	.0	.0
MONTH	6.0	.5	.5	.0	1.5	.0				.0	.5	.0

15273095 LITTLE RABBIT CREEK ABOVE GOLDENVIEW DRIVE AT ANCHORAGE

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1980-81, 1984 to March 1986 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: November 1983 to March 1986.
WATER TEMPERATURE: November 1983 to March 1986.

INSTRUMENTATION.--USGS mini-monitor and dual-parameter-digital recorder since November 1983, set for thirty-minute recording interval.

REMARKS.--No temperature or conductance record Oct. 1-9 and Mar. 22-31 due to malfunction of the recording instruments. Records represent specific conductance and water temperature at the sensors within 1.0 microsiemens and 0.5°C respectively.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 229 microsiemens, Apr. 25, 1984; minimum, 83 microsiemens, June 5, 1985.
WATER TEMPERATURE: Maximum, 10.5°C, on several days during summer months, 1984-85; minimum, 0.0°C, on many days during winter period.

EXTREMES FOR CURRENT PERIOD, October 1985 to March 1986.--
SPECIFIC CONDUCTANCE: Maximum recorded, 204 microsiemens, Mar. 21; minimum recorded, 130 microsiemens, Oct. 12, 20-22.
WATER TEMPERATURE: Maximum recorded, 4.5°C, Oct. 10; minimum, 0.0°C, on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)
OCT			
09...	1120	E12	31

E ESTIMATED

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, OCTOBER 1985 TO MARCH 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	---	---	---	138	136	137	158	156	157	168	167	168
2	---	---	---	138	137	137	158	155	157	170	168	169
3	---	---	---	140	138	139	158	156	157	172	170	171
4	---	---	---	142	139	141	158	155	156	172	167	170
5	---	---	---	142	141	141	157	156	157	168	167	167
6	---	---	---	142	141	142	160	158	159	170	168	169
7	---	---	---	141	140	141	163	160	161	170	169	170
8	---	---	---	143	141	142	167	163	164	173	170	172
9	---	---	---	144	143	144	165	162	164	174	172	174
10	133	131	132	144	142	143	164	159	161	176	174	175
11	133	131	132	144	142	143	161	159	160	181	175	177
12	132	130	131	143	141	142	162	160	161	183	180	181
13	134	131	132	142	140	141	162	161	161	184	182	183
14	133	132	133	143	140	141	165	162	163	186	184	185
15	134	132	133	141	139	140	167	165	166	187	185	186
16	134	132	133	143	141	142	168	167	167	188	187	188
17	135	133	134	143	142	143	169	168	168	190	188	189
18	134	131	132	143	141	142	170	168	169	190	189	190
19	133	131	132	144	142	143	171	168	170	191	190	190
20	132	130	131	145	144	144	171	165	168	191	190	190
21	132	130	131	146	144	145	168	165	166	192	190	191
22	132	130	131	147	145	146	168	164	166	192	191	192
23	132	131	132	148	146	147	169	165	167	193	191	192
24	133	131	132	149	148	148	168	162	164	193	191	192
25	133	131	132	149	148	149	166	164	165	192	191	192
26	134	132	133	151	149	150	168	165	167	193	192	193
27	135	133	134	151	150	151	166	164	165	193	192	193
28	136	135	135	152	151	152	165	164	164	193	192	193
29	135	133	134	155	153	153	166	165	166	194	192	193
30	136	134	135	155	154	155	168	166	167	194	192	193
31	137	134	135	---	---	---	168	167	168	194	192	193
MONTH	137	130	133	155	136	144	171	155	164	194	167	183

15273095 LITTLE RABBIT CREEK ABOVE GOLDENVIEW DRIVE AT ANCHORAGE--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, OCTOBER 1985 TO MARCH 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	194	192	193	200	198	199						
2	194	193	193	200	198	199						
3	193	192	193	200	198	199						
4	193	192	193	200	198	199						
5	194	192	193	201	198	199						
6	195	193	194	201	198	200						
7	195	194	194	202	200	201						
8	195	193	194	202	199	201						
9	194	193	194	202	200	201						
10	195	193	194	202	201	201						
11	194	193	194	202	201	202						
12	194	192	193	203	201	202						
13	193	192	193	203	201	202						
14	193	191	192	202	201	201						
15	193	191	192	202	201	202						
16	193	192	192	202	201	201						
17	194	192	193	203	201	202						
18	194	192	193	203	202	202						
19	197	193	195	203	201	202						
20	200	197	199	203	202	202						
21	202	199	200	204	202	202						
22	201	200	201	---	---	---						
23	202	200	201	---	---	---						
24	202	200	201	---	---	---						
25	203	201	202	---	---	---						
26	202	200	201	---	---	---						
27	201	199	200	---	---	---						
28	200	198	199	---	---	---						
29	---	---	---	---	---	---						
30	---	---	---	---	---	---						
31	---	---	---	---	---	---						
MONTH	203	191	196	204	198	201						

TEMPERATURE, WATER (DEG. C), OCTOBER 1985 TO MARCH 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	---	---	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
2	---	---	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0
3	---	---	.0	.0	.0	.0	.5	.0	.5	.0	.0	.0
4	---	---	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
5	---	---	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
6	---	---	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
7	---	---	.0	.0	.0	.0	.0	.0	.5	.0	.0	.0
8	---	---	.0	.0	.0	.0	.0	.0	.5	.5	.0	.0
9	---	---	.0	.0	.0	.0	.0	.0	.5	.5	.0	.0
10	4.5	3.0	.5	.0	.0	.0	.0	.0	.5	.5	.0	.0
11	4.0	2.5	.5	.0	.0	.0	.0	.0	.5	.5	.0	.0
12	3.0	2.0	.5	.0	.0	.0	.5	.0	.5	.0	.0	.0
13	3.0	1.5	.5	.0	.0	.0	.5	.0	.5	.0	.0	.0
14	1.5	.5	.0	.0	.0	.0	.5	.5	.0	.0	.5	.0
15	3.0	1.5	.0	.0	.0	.0	.5	.5	.0	.0	.5	.0
16	3.0	2.0	.0	.0	.0	.0	.5	.0	.0	.0	.5	.0
17	2.5	2.0	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0
18	2.0	.5	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0
19	.5	.5	.0	.0	.0	.0	.0	.0	.0	.0	.5	.0
20	.5	.5	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
21	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
22	.5	.0	.0	.0	.5	.0	.0	.0	.0	.0	---	---
23	.5	.0	.0	.0	.5	.0	.0	.0	.0	.0	---	---
24	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	---	---
25	.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	---	---
26	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	---	---
27	.0	.0	.0	.0	.5	.5	.0	.0	.0	.0	---	---
28	.5	.0	.0	.0	.5	.0	.0	.0	.0	.0	---	---
29	.5	.0	.0	.0	.5	.0	.0	.0	---	---	---	---
30	.5	.0	.0	.0	.5	.0	.0	.0	---	---	---	---
31	.5	.0	---	---	.5	.0	.0	.0	---	---	---	---
MONTH	4.5	.0	.5	.0	.5	.0	.5	.0	.5	.0	.5	.0

15273105 RABBIT CREEK AT NEW SEWARD HIGHWAY AT ANCHORAGE

LOCATION.--Lat 61°04'35", long 149°49'37", in SW¼ sec.4, T.11 N., R.drologic Unit 19050002, at outlet of Potter Marsh, on upstream side of culverts near mi 117 of New Seward Highway and 10 mi south of downtown Anchorage Post Office.

DRAINAGE AREA.--24.5 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1983 to March 1986 (discontinued).

GAGE.--Water-stage, velocity, and flow-direction recorders. Datum of gage is 14.720 ft above National Geodetic Vertical Datum of 1929 (Alaska Department of Highways and Public Facilities aerophotography control point). No gage prior to Mar. 19, 1984. Prior to Apr. 1, 1985, at different datum.

REMARKS.--Estimated daily discharges: Oct. 12-19, 28-29 and Nov. 4 to Mar. 31. Records poor. Reverse flow into Potter Marsh occurs during high tides causing backwater. The tide affected dates (when gage-height record was available) were Oct. 13-28 and Oct 28-29. Daily discharge values for these days were estimated based on the natural flow from the basin without regard to storage in Potter Marsh due to tidal inflow and backwater.

EXTREMES FOR P 10, 1983; minimum daily, about 5.0 ft³/s, Mar. 25 to Apr. 4, 1985, greatest reverse flow measured, 131 ft³/s, Apr. 17, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, not affected by tide, during period October to March, 70 ft³/s, Oct. 9, gage height, 13.39 ft; minimum daily, about 5.5 ft³/s, Feb. 20 to Mar. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1985 TO MARCH 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	52	14	10	18	9.0	5.5						
2	48	14	10	16	9.0	5.5						
3	45	17	10	16	9.0	6.0						
4	44	16	10	16	8.0	6.0						
5	41	15	9.0	16	7.0	6.0						
6	41	14	9.0	13	7.0	6.0						
7	41	13	9.0	11	10	6.0						
8	50	12	10	11	10	7.0						
9	65	12	20	10	10	7.0						
10	52	14	25	10	10	7.0						
11	43	14	20	10	8.0	7.0						
12	42	14	14	10	8.0	6.0						
13	42	14	14	9.0	8.0	6.0						
14	41	14	10	9.0	7.0	6.0						
15	45	14	10	9.0	7.0	6.0						
16	51	12	10	9.0	7.0	6.0						
17	46	12	12	9.0	6.0	6.0						
18	37	10	12	8.0	6.0	6.0						
19	30	10	15	8.0	6.0	6.0						
20	25	10	25	8.0	5.5	6.0						
21	30	10	20	8.0	5.5	6.0						
22	26	10	18	8.0	5.5	6.0						
23	17	10	18	7.0	5.5	6.0						
24	14	10	18	7.0	5.5	6.0						
25	14	10	14	7.0	5.5	6.0						
26	17	10	14	7.0	5.5	6.0						
27	18	12	14	7.0	5.5	6.0						
28	22	12	18	6.0	5.5	6.0						
29	20	10	18	6.0	---	6.0						
30	16	10	18	6.0	---	6.0						
31	14	---	18	6.0	---	6.0						
TOTAL	1089	369	452.0	301.0	201.5	189.0						
MEAN	35.1	12.3	14.6	9.71	7.20	6.10						
MAX	65	17.0										
MIN	14	10	9.0	6.0	5.5	5.5						
CFSM	1.43	.50	.60	.40	.29	.25						
IN.	1.65	.56	.69	.46	.31	.29						
AC-FT	2160	732	897	597	400	375						

CAL YR 1985 TOTAL 10156.1 MEAN 27.8 MAX 91 MIN 5.0 CFSM 1.14 IN 15.42 AC-FT 20140

15273105 RABBIT CREEK AT NEW SEWARD HIGHWAY AT ANCHORAGE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1984 to March 1986 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: March 1984 to March 1985 (fragmentary), and April to December 1985.
WATER TEMPERATURE: March to October 1984 (fragmentary), and April 1985 to March 1986.

INSTRUMENTATION.--Water-quality monitor and dual parameter electronic recorder since March 1984, set for thirty-minute recording interval.

REMARKS.--Interruptions in record were due to malfunction of the recording instruments and probe out of water or encased in ice. Records represent specific conductance and water temperature at the sensors within 10 microsiemens and 0.5°C respectively. The gage is affected by tides greater than 30 ft. Recorded conductance values (¶1000 microsiemens) during extreme high tides are fair because range of values exceeds instrument calibration.

EXTREMES FOR PERIOD OF RECORD.--
SPECIFIC CONDUCTANCE: Maximum recorded, 38,300 microsiemens, Mar. 19, 1984; minimum recorded, 40 microsiemens, July 2, 1985.
WATER TEMPERATURE: Maximum recorded, 16.5°C, Aug. 1, 24, and Sept. 13, 1984; minimum.0.0°C, on many days during winter period.

EXTREMES FOR CURRENT PERIOD.--October to December 1985.
SPECIFIC CONDUCTANCE: Maximum for the period, 23,400 microsiemens, Dec. 12; minimum, 113 microsiemens, Oct. 1.
WATER TEMPERATURE: Maximum for the period, 7.0°C, Oct. 13; minimum, 0.0°C, on many days during winter period.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SEDIMENT, SUSPENDED (MG/L) (80154)
OCT			
09...	1040	E60	75
15...	1921	E-35	389
15...	1931	E-45	1000
15...	1941	E-50	1220
15...	1951	E-55	936
15...	2001	E-60	1150
15...	2016	E-60	1910
15...	2031	E-50	1920
15...	2046	E-25	1760
15...	2101	E0.0	1730
15...	2116	E0.0	1400
15...	2131	E110	1100
15...	2146	E99	928
15...	2211	E97	500
15...	2241	E92	212
15...	2321	E87	56
15...	2351	E87	39
16...	2001	E-36	463
16...	2011	E-40	1000
16...	2021	E-45	982
16...	2031	E-55	743
16...	2046	E-60	605
16...	2101	E-60	530
16...	2116	E-30	455
16...	2131	E0.0	373
16...	2146	E100	320
16...	2201	E100	253

E Estimated

15273105 RABBIT CREEK AT NEW SEWARD HIGHWAY AT ANCHORAGE--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, OCTOBER TO DECEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	123	113	121	---	---	---	---	---	---			
2	124	114	123	---	---	---	---	---	---			
3	124	114	123	---	---	---	---	---	---			
4	124	114	124	---	---	---	---	---	---			
5	125	115	125	---	---	---	---	---	---			
6	125	115	125	---	---	---	---	---	---			
7	125	125	125	---	---	---	---	---	---			
8	156	126	145	---	---	---	---	---	---			
9	146	126	138	---	---	---	---	---	---			
10	130	130	130	---	---	---	270	140	163			
11	130	120	129	19400	---	---	21600	160	2350			
12	130	120	127	18400	194	2530	23400	170	3220			
13	13700	120	1380	22100	175	3120	1790	200	655			
14	16900	140	2500	20200	275	2390	1410	211	356			
15	18900	230	4490	1070	---	---	211	141	162			
16	17400	350	4200	185	---	---	141	131	138			
17	12800	350	1860	---	---	---	131	131	131			
18	830	230	299	---	---	---	131	131	131			
19	250	190	226	---	---	---	250	130	176			
20	230	160	200	---	---	---	250	180	195			
21	160	150	156	---	---	---	220	190	202			
22	170	150	155	---	---	---	1180	179	337			
23	190	170	179	---	---	---	989	209	458			
24	180	160	167	---	---	---	478	188	274			
25	---	---	---	---	---	---	188	158	168			
26	---	---	---	---	---	---	157	148	149			
27	---	---	---	---	---	---	157	147	147			
28	---	---	---	---	---	---	167	137	150			
29	---	---	---	---	---	---	---	---	---			
30	---	---	---	---	---	---	---	---	---			
31	---	---	---	---	---	---	---	---	---			

TEMPERATURE, WATER (DEG. C), OCTOBER 1985 TO MARCH 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	6.0	3.5	4.5	---	---	---	---	---	---			
2	6.0	4.0	5.0	---	---	---	.0	.0	.0			
3	5.0	4.0	4.5	---	---	---	---	---	---			
4	4.5	2.5	3.5	---	---	---	---	---	---			
5	3.5	1.0	2.5	---	---	---	---	---	---			
6	4.0	2.5	3.0	---	---	---	---	---	---			
7	5.0	3.5	4.0	---	---	---	.5	.0	.0			
8	6.0	4.5	5.0	---	---	---	1.0	.5	.5			
9	5.5	4.0	4.5	---	---	---	.5	.0	.0			
10	5.0	3.5	4.0	---	---	---	.0	.0	.0			
11	4.5	2.5	3.5	.5	.0	.0	.5	.0	.0			
12	4.0	2.0	3.0	.5	.0	.0	1.0	.0	.0			
13	7.0	1.5	2.5	.5	.0	.0	.5	.0	.0			
14	6.0	.5	2.0	.5	.0	.0	.0	.0	.0			
15	4.5	1.0	2.5	---	---	---	.5	.0	.0			
16	5.5	2.5	3.5	---	---	---	.5	.0	.5			
17	4.5	2.0	2.5	---	---	---	.5	.0	.5			
18	2.5	.0	1.0	---	---	---	.5	.0	.0			
19	.5	.0	.0	---	---	---	.5	.0	.5			
20	.0	.0	.0	---	---	---	.5	.0	.5			
21	.0	.0	.0	---	---	---	.5	.0	.5			
22	.0	.0	.0	---	---	---	.5	.0	.5			
23	.0	.0	.0	---	---	---	.5	.0	.0			
24	.0	.0	.0	---	---	---	.5	.5	.5			
25	.5	.0	.5	---	---	---	.5	.0	.0			
26	---	.0	---	---	---	---	.5	.0	.5			
27	---	.5	---	---	---	---	.5	.5	.5			
28	1.0	.5	.5	---	---	---	1.0	.0	.5			
29	---	---	---	---	---	---	---	---	---			
30	---	---	---	---	---	---	---	---	---			
31	---	---	---	---	---	---	---	---	---			
MONTH	7.0	.0	2.5		.0	.0		.0	.0			

15273105 RABBIT CREEK AT NEW SEWARD HIGHWAY AT ANCHORAGE--Continued

TEMPERATURE, WATER (DEG. C), OCTOBER 1985 TO MARCH 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
	FEBRUARY			MARCH			APRIL			MAY		
1	---	---	---	1.5	.5	1.0						
2	---	---	---	1.5	.5	1.0						
3	---	---	---	1.0	.5	1.0						
4	.0	.0	.0	2.0	1.0	1.5						
5	.5	.0	.0	2.0	1.0	1.5						
6	.5	.0	.5	2.5	1.5	2.0						
7	.0	.0	.0	1.5	.5	1.0						
8	.5	.0	.0	2.0	.5	1.0						
9	.0	.0	.0	.5	.5	.5						
10	.0	.0	.0	.5	.0	.5						
11	.0	.0	.0	.0	.0	.0						
12	.0	.0	.0	.0	.0	.0						
13	---	---	---	.0	.0	.0						
14	---	---	---	.0	.0	.0						
15	---	---	---	.0	.0	.0						
16	---	---	---	.0	.0	.0						
17	---	---	---	.0	.0	.0						
18	.0	.0	.0	---	---	---						
19	2.0	.0	1.0	---	---	---						
20	2.0	1.5	1.5	---	---	---						
21	2.5	.0	1.0	---	---	---						
22	1.0	.0	.0	---	---	---						
23	1.0	.0	.5	---	---	---						
24	1.0	.0	.5	.0	.0	.0						
25	1.0	.0	.5	---	---	---						
26	1.0	.0	.5	.5	.0	.0						
27	1.0	.0	.5	1.0	.0	.0						
28	1.5	.5	.5	1.0	.0	.0						
29	---	---	---	1.0	.0	.0						
30	---	---	---	---	---	---						
31	---	---	---	---	---	---						
MONTH		.0	.5		.0	.5						

15274550 LITTLE CAMPBELL CREEK AT NATHAN DRIVE NEAR ANCHORAGE

LOCATION.--Lat 61°09'13", long 149°52'18", in SW¼SE¼ sec.6, T.12 N., R.3 W., Municipality of Anchorage, Hydrologic Unit 19050002, on left bank 250 ft downstream from Nathan Drive, 0.2 mi upstream from mouth, and 4.5 mi south of intersection of Glenn and Seward Highways. Prior to July 10 at site 650 ft downstream.

DRAINAGE AREA.--15 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May to September 1981, June to September 1986.

GAGE.--Water-stage recorder. Elevation of gage is 82 ft above National Geodetic Vertical Datum of 1929, from topographic map. May 22 to Sept. 30, 1981, water-stage recorder, and June 1 to July 9, 1986, nonrecording gage at site 650 ft downstream at datum 5.32 ft lower.

REMARKS.--Estimated daily discharges: June 1, 2, 6-8, 14, 15, 21, 22, 28-30, July 4-6, and Sept. 7, 8. Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 49 ft^3/s, Aug. 13, 1986, gage height, 10.71 ft; minimum discharge 0.32 ft^3/s, July 12, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--No flow observed Dec. 30, 1980.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period June to September 1986, 49 ft^3/s, Aug. 13, gage height, 10.71 ft; minimum discharge, 0.32 ft^3/s, July 12.

DISCHARGE, IN CUBIC FEET PER SECOND, JUNE TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1									3.0	.96	1.5	7.9
2									2.9	1.0	1.7	7.0
3									2.8	1.0	1.4	3.7
4									2.3	.95	1.8	2.6
5									2.6	.90	1.8	2.5
6									2.4	1.0	2.0	2.3
7									3.0	1.2	2.1	6.7
8									2.4	1.0	2.7	7.3
9									2.2	.89	1.9	6.4
10									2.0	.65	4.1	4.0
11									1.9	.46	2.7	3.1
12									1.9	.76	6.2	2.8
13									1.8	3.3	17	2.6
14									1.7	1.9	6.7	2.3
15									1.7	1.4	6.9	2.3
16									1.6	2.2	5.9	6.9
17									2.3	1.8	4.3	6.8
18									1.5	1.3	5.1	5.5
19									1.4	.77	4.0	4.1
20									1.5	4.4	3.4	5.6
21									1.4	4.1	3.1	7.0
22							+4.7		1.5	2.6	3.1	8.4
23							+5.5		1.6	4.3	3.1	14
24							+7.6		1.4	2.4	4.8	8.5
25									1.3	2.2	4.2	6.8
26									1.3	4.3	4.0	5.8
27									1.3	2.4	4.0	5.9
28									1.2	1.9	3.4	5.2
29									1.1	1.4	3.0	5.3
30							+15		1.0	1.3	2.7	5.6
31									---	1.6	3.6	---
TOTAL									56.0	56.34	122.2	164.9
MEAN									1.87	1.82	3.94	5.50
MAX									3.0	4.4	17	14
MIN									1.0	.46	1.4	2.3
CFSM									.13	.12	.26	.37
IN.									.14	.14	.30	.41
AC-FT									111	112	242	327

+ Result of discharge measurement.

15274550 LITTLE CAMPBELL CREEK AT NATHAN DRIVE NEAR ANCHORAGE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1966, 1973, 1977, 1980-82, 1986.

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: July to September 1986.
WATER TEMPERATURE: July to September 1986.
SUSPENDED-SEDIMENT DISCHARGE: July to September 1986.

INSTRUMENTATION.--Water-quality monitor since July 11, 1986. Automatic pumping sampler since July 22, 1986.

REMARKS.--No specific-conductance and water-temperature records July 22-25 due to recorder malfunction. No water temperature record Sept. 12 due to water surface below temperature sensor. Records represent specific conductance at sensor within 10 microsiemens and water temperature within 0.5°C. Suspended-sediment samples were collected with a depth-integrating sampler, July 26, Aug. 12, 26, and Sept. 23, 29, to adjust concentration values obtained with pumping sampler. Unpublished records of the heavy metals, iron, lead, and zinc, and of fecal coliform for Aug. 12 and Sept. 20, 22 are available in files of the Subdistrict office.

EXTREMES FOR CURRENT PERIOD.--July 11 to September 30.
SPECIFIC CONDUCTANCE: Maximum for period, 764 microsiemens, Aug. 8; minimum, 146 microsiemens, Aug. 13.
WATER TEMPERATURE: Maximum for period, 18.5°C, July 19; minimum, 1.5°C, Sept. 26.
SEDIMENT CONCENTRATION: Maximum daily mean for period, 454 mg/L, Aug. 13; minimum daily mean, 6 mg/L, Sept. 14.
SEDIMENT DISCHARGE: Maximum daily mean for period, 31 tons/day, Aug. 13; minimum daily mean, 0.03 tons/day, July 19 (estimated).

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
APR												
22...	1415	4.7	259	8.00	--	0.0	--	758	12.2	84	--	--
23...	1645	6.5	255	7.80	--	1.0	70	759	11.3	80	K50	1300
24...	1645	9.0	246	7.70	--	2.5	70	757	10.7	79	140	2300
JUN												
04...	1540	2.6	266	8.40	11.0	8.0	--	762	10.6	90	<3	K6
09...	1510	2.1	269	8.30	15.0	11.5	--	757	10.2	94	--	--
11...	1525	1.9	275	8.40	--	12.0	4.5	770	9.7	89	K3	K19
17...	1345	2.3	301	8.40	--	13.0	27	757	9.7	93	92	400
26...	1300	1.3	293	8.50	17.0	11.5	5.5	771	11.0	100	27	110
JUL												
15...	1303	1.4	281	8.30	13.0	12.5	6.3	768	9.8	91	93	140
29...	1355	1.5	289	8.40	--	13.0	5.5	767	10.2	96	140	140
AUG												
12...	1525	5.3	267	8.00	--	10.5	90	762	9.2	82	2000	>3300
12...	2245	9.8	209	7.80	--	10.5	270	762	8.8	79	2500	>10000
26...	1435	5.1	288	8.10	--	9.5	6.5	755	10.1	89	460	3000
SEP												
08...	1100	5.6	282	7.90	--	13.0	10	750	10.6	102	K1100	830
20...	0900	5.0	314	8.00	--	8.5	--	756	10.4	90	670	--
20...	1100	4.6	311	8.00	--	8.5	--	756	10.8	93	1100	--
20...	1300	4.5	308	8.00	--	9.0	--	756	10.8	94	900	--
20...	1450	4.4	307	8.10	--	9.5	--	756	11.1	98	--	--
22...	1620	9.3	271	7.20	--	9.0	--	749	10.3	91	--	--
22...	1910	13	223	7.40	--	9.0	--	749	10.1	89	--	--
22...	2200	14	212	7.30	--	8.0	--	749	10.0	86	K900	--
23...	0635	13	234	7.30	--	6.5	--	757	10.6	87	--	--
25...	1158	6.1	277	7.80	--	2.5	5.3	762	12.7	93	K64	980

K NON-IDEAL COLONY COUNT

15274550 LITTLE CAMPBELL CREEK AT NATHAN DRIVE NEAR ANCHORAGE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986--Continued

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	HARDNESS (MG/L AS CACO3) (00900)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)
APR 23...	1645	6.5	86	23	69	65	79	0	160	130	0.550
24...	1645	9.0	86	24	65	62	76	0	155	214	0.460
JUN 17...	1345	2.3	140	13	114	113	--	--	186	53	0.490
AUG 12...	2243	9.8	--	--	--	--	--	--	--	--	--
SEP 08...	1100	5.6	130	14	100	99	120	0	183	6	0.490
20...	0600	5.7	--	--	--	--	--	--	--	--	--
20...	0900	5.0	--	--	--	--	--	--	--	--	--
20...	1100	4.6	--	--	--	--	--	--	--	--	--
20...	1300	4.5	--	--	--	--	--	--	--	--	--
22...	1600	8.3	--	--	--	--	--	--	--	--	--
22...	1900	13	--	--	--	--	--	--	--	--	--
22...	2200	14	--	--	--	--	--	--	--	--	--
23...	0600	13	--	--	--	--	--	--	--	--	--

DATE	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	ANTIMONY, TOTAL (UG/L AS SB) (01097)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)
APR 23...	0.050	0.600	0.090	1	7	<10	1	20	56	17000
24...	0.040	0.500	0.070	1	6	<10	<1	21	36	13000
JUN 17...	0.010	0.500	0.010	<1	2	<10	<1	27	3	2300
AUG 12...	--	--	--	--	--	--	--	--	--	15000
SEP 08...	<0.010	0.500	0.020	<1	1	<10	<1	8	3	1100
20...	--	--	--	--	--	--	--	--	--	2900
20...	--	--	--	--	--	--	--	--	--	2200
20...	--	--	--	--	--	--	--	--	--	1700
20...	--	--	--	--	--	--	--	--	--	960
22...	--	--	--	--	--	--	--	--	--	9200
22...	--	--	--	--	--	--	--	--	--	12000
22...	--	--	--	--	--	--	--	--	--	9700
23...	--	--	--	--	--	--	--	--	--	3300

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	THALLIUM, TOTAL (UG/L AS TL) (01059)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)
APR 23...	33	0.10	32	<1	<1	<1	190	12	<0.010	<1
24...	29	<0.10	36	<1	1	<1	160	24	<0.010	<1
JUN 17...	<5	<0.10	2	<1	<1	<1	80	7.2	<0.010	<1
AUG 12...	75	--	--	--	--	--	190	--	--	--
SEP 08...	<5	<0.10	2	<1	<1	<1	90	7.9	<0.010	<1
20...	<5	--	--	--	--	--	200	--	--	--
20...	<5	--	--	--	--	--	330	--	--	--
20...	<5	--	--	--	--	--	220	--	--	--
20...	<5	--	--	--	--	--	170	--	--	--
22...	36	--	--	--	--	--	350	--	--	--
22...	24	--	--	--	--	--	520	--	--	--
22...	17	--	--	--	--	--	300	--	--	--
23...	5	--	--	--	--	--	280	--	--	--

15274550 LITTLE CAMPBELL CREEK AT NATHAN DRIVE NEAR ANCHORAGE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986--Continued

DATE	TIME	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACE-NAPHTH-YLENE TOTAL (UG/L) (34200)	ACE-NAPHTH-ENE TOTAL (UG/L) (34205)	ANTHRA-CENE TOTAL (UG/L) (34220)
APR 24...	1645	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0
JUN 17...	1345	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0
SEP 08...	1100	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 5.0	< 5.0	< 5.0

DATE	BENZO B FLUOR-AN-THENE TOTAL (UG/L) (34230)	BENZO K FLUOR-AN-THENE TOTAL (UG/L) (34242)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	DELTA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (34259)	BIS 2-CHLORO-ETHYL ETHER TOTAL (UG/L) (34273)	BIS (2-CHLORO-ETHOXY) METHANE TOTAL (UG/L) (34278)	BIS (2-CHLORO-ISO-PROPYL) ETHER TOTAL (UG/L) (34283)	N-BUTYL BENZYL PHTHAL-ATE TOTAL (UG/L) (34292)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	CHRY-SENE TOTAL (UG/L) (34320)	DIETHYL PHTHAL-ATE TOTAL (UG/L) (34336)
APR 24...	< 10.0	< 10.0	< 10.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 10.0	< 5.0
JUN 17...	< 10.0	< 10.0	< 10.0	< 0.01	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 10.0	< 5.0
SEP 08...	< 10.0	< 10.0	< 10.0	--	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 10.0	< 5.0

DATE	DI-METHYL PHTHAL-ATE TOTAL (UG/L) (34341)	ETHYL-BENZENE TOTAL (UG/L) (34371)	FLUOR-ANTHENE TOTAL (UG/L) (34376)	FLUOR-ENE TOTAL (UG/L) (34381)	HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L) (34386)	HEXA-CHLORO-ETHANE TOTAL (UG/L) (34396)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L) (34403)	ISO-PHORONE TOTAL (UG/L) (34408)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	N-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L) (34428)
APR 24...	< 5.0	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0
JUN 17...	< 5.0	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	< 0.20	< 0.20	< 2.0	< 5.0
SEP 08...	< 5.0	< 0.20	< 5.0	< 5.0	< 5.0	< 5.0	< 10.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0

DATE	N-NITRO-SODI-PHENY-LAMINE TOTAL (UG/L) (34433)	N-NITRO-SODI-METHY-LAMINE TOTAL (UG/L) (34438)	NITRO-BENZENE TOTAL (UG/L) (34447)	PARA-CHLORO-META CRESOL TOTAL (UG/L) (34452)	PHENAN-THRENE TOTAL (UG/L) (34461)	PYRENE TOTAL (UG/L) (34469)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)
APR 24...	< 5.0	< 5.0	< 5.0	< 30.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	0.30	1.4	< 0.20
JUN 17...	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
SEP 08...	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20

DATE	1,1,2,2 TETRA-CHLORO-ETHANE TOTAL (UG/L) (34516)	BENZOGHI PERYLENE1,12-BENZOPERYLENE TOTAL (UG/L) (34521)	BENZO A ANTHRACENE1,2-BENZANTHRACENE TOTAL (UG/L) (34526)	1,2-DI-CHLORO-BENZENE TOTAL (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDICHLORO-ETHYL-ENE TOTAL (UG/L) (34546)	1,2,4-TRI-CHLORO-BENZENE TOTAL (UG/L) (34551)	1,2,5,6-DIBENZ-ANTHRA-CENE TOTAL (UG/L) (34556)	1,3-DI-CHLORO-PROPANE TOTAL (UG/L) (34561)	1,3-DI-CHLORO-BENZENE TOTAL (UG/L) (34566)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L) (34571)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L) (34576)
APR 24...	< 0.20	< 10.0	< 5.0	< 0.20	< 0.20	< 0.20	< 5.0	< 10.0	< 0.20	< 0.20	< 0.20	< 0.20
JUN 17...	< 0.20	< 10.0	< 10.0	< 0.20	< 0.20	< 0.20	< 5.0	< 10.0	< 0.20	< 0.20	< 0.20	< 0.20
SEP 08...	< 0.20	< 10.0	< 10.0	< 0.20	< 0.20	< 0.20	< 5.0	< 10.0	< 0.20	< 0.20	< 0.20	< 0.20

15274550 LITTLE CAMPBELL CREEK AT NATHAN DRIVE NEAR ANCHORAGE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986--Continued

DATE	2-CHLORO-NAPHTHALENE TOTAL (UG/L) (34581)	2-CHLORO-PHENOL TOTAL (UG/L) (34586)	2-NITRO-PHENOL TOTAL (UG/L) (34591)	DI-N-OCTYL PHTHALATE TOTAL (UG/L) (34596)	2,4-DI-CHLORO-PHENOL TOTAL (UG/L) (34601)	2,4-DI-METHYL-PHENOL TOTAL (UG/L) (34606)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L) (34611)	2,4,-DI-NITRO-PHENOL TOTAL (UG/L) (34616)	2,4,6-TRI-CHLORO-PHENOL TOTAL (UG/L) (34621)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L) (34626)	4-BROMO-PHENYL PHENYL ETHER TOTAL (UG/L) (34636)
APR 24...	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<5.0
JUN 17...	<5.0	<6.0	<6.0	<10.0	<6.0	<6.0	<5.0	<20.0	<5.0	<5.0	<5.0
SEP 08...	<5.0	<6.0	<6.0	<10.0	<6.0	<6.0	<5.0	<20.0	<5.0	<5.0	<5.0

DATE	4-CHLORO-PHENYL PHENYL ETHER TOTAL (UG/L) (34641)	4-NITRO-PHENOL TOTAL (UG/L) (34646)	4,6-DINITRO-ORTHO-CRESOL TOTAL (UG/L) (34657)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	AROCLOR 1016 PCB TOTAL (UG/L) (34671)	PHENOL (C6H-5OH) TOTAL (UG/L) (34694)	NAPHTH-ALENE TOTAL (UG/L) (34696)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	PENTA-CHLORO-PHENOL TOTAL (UG/L) (39032)	PER-THANE TOTAL (UG/L) (39034)
APR 24...	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0	<5.0	<0.20	<0.20	<30.0	<0.1
JUN 17...	<5.0	<30.0	<30.0	<0.20	<0.1	<6.0	<5.0	<0.20	<0.20	<30.0	<0.1
SEP 08...	<5.0	<30.0	<30.0	<0.20	<0.1	<6.0	<5.0	<0.20	<0.20	<30.0	<0.1

DATE	1,2-DIBROMO ETHYLENE TOTAL (UG/L) (39082)	BIS(2-ETHYL HEXYL) PHTHALATE TOTAL (UG/L) (39100)	DI-N-BUTYL PHTHALATE TOTAL (UG/L) (39110)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYLENE TOTAL (UG/L) (39180)	NAPH-THALENES, POLY-CHLOR. TOTAL (UG/L) (39250)	ALDRIN, TOTAL (UG/L) (39330)	ALPHA BHC TOTAL (UG/L) (39337)	BETA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (39338)	LINDANE TOTAL (UG/L) (39340)	CHLOR-DANE, TOTAL (UG/L) (39350)
APR 24...	<0.2	<5.0	<5.0	<0.20	<0.2	<0.10	<0.010	--	--	<0.010	<0.1
JUN 17...	<0.2	<5.0	<5.0	<0.20	<0.2	<0.10	<0.010	<0.01	<0.01	<0.010	<0.1
SEP 08...	<0.2	<5.0	<5.0	<0.20	<0.2	<0.10	<0.010	--	--	<0.010	<0.1

DATE	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI-ELDRIN TOTAL (UG/L) (39380)	ENDO-SULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	TOX-APHENE, TOTAL (UG/L) (39400)	HEPTA-CHLOR, TOTAL (UG/L) (39410)	HEPTA-CHLOR EPOXIDE TOTAL (UG/L) (39420)	METH-OXY-CHLOR, TOTAL (UG/L) (39480)	AROCLOR 1221 PCB TOTAL (UG/L) (39488)
APR 24...	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.01	<0.1
JUN 17...	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.01	<0.1
SEP 08...	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.01	<0.1

DATE	AROCLOR 1232 PCB TOTAL (UG/L) (39492)	AROCLOR 1242 PCB TOTAL (UG/L) (39496)	AROCLOR 1248 PCB TOTAL (UG/L) (39500)	AROCLOR 1254 PCB TOTAL (UG/L) (39504)	AROCLOR 1260 PCB TOTAL (UG/L) (39508)	PCB, TOTAL (UG/L) (39516)	HEXA-CHLORO-BENZENE TOTAL (UG/L) (39700)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L) (39702)	MIREX, TOTAL (UG/L) (39755)	STYRENE TOTAL (UG/L) (77128)	XYLENE WATER WHOLE TOT REC (UG/L) (81551)
APR 24...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.01	<0.2	--
JUN 17...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.01	<0.2	--
SEP 08...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.01	<0.2	<0.2

15274550 LITTLE CAMPBELL CREEK AT NATHAN DRIVE NEAR ANCHORAGE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986--Continued

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
APR					
23...	1645	6.5	292	5.1	--
24...	1645	9.0	327	7.9	--
JUN					
04...	1540	2.6	12	0.08	--
11...	1525	1.9	10	0.05	--
17...	1345	2.3	54	0.34	--
26...	1300	1.3	7	0.02	--
JUL					
15...	1303	1.4	15	0.06	--
26...	1100	4.3	23	0.27	93
26...	1300	3.8	17	0.17	92
29...	1355	1.5	7	0.03	92
AUG					
12...	1525	5.3	318	4.6	99
12...	2245	9.8	315	8.3	97
26...	1435	5.1	10	0.14	96
SEP					
08...	1100	5.6	16	0.24	93
20...	0600	5.7	50	0.77	91
20...	0700	5.8	57	0.89	--
20...	0900	5.0	29	0.39	98
20...	1100	4.6	20	0.25	97
20...	1300	4.5	16	0.19	96
20...	1452	4.4	15	0.18	--
20...	1830	4.5	41	0.50	--
22...	1500	6.0	26	0.42	--
22...	1620	9.3	189	4.7	97
22...	1910	13	205	7.2	98
22...	2010	14	224	8.5	--
22...	2015	14	221	8.4	--
22...	2125	15	226	9.2	94
22...	2200	14	169	6.4	96
23...	0025	28	462	35	87
23...	0630	13	73	2.6	90
23...	0925	11	50	1.5	--
23...	1200	11	49	1.5	--
23...	1600	11	55	1.6	--
25...	1158	6.1	15	0.25	--
28...	0820	5.4	10	0.15	--
28...	2030	5.0	7	0.09	--
29...	0915	4.9	9	0.12	92

15274550 LITTLE CAMPBELL CREEK AT NATHAN DRIVE NEAR ANCHORAGE--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, JULY TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1				---	---	---	313	304	307	300	187	264
2				---	---	---	323	298	307	332	205	283
3				---	---	---	337	310	319	288	274	281
4				---	---	---	337	284	308	298	289	294
5				---	---	---	304	292	297	317	299	305
6				---	---	---	309	276	294	322	308	314
7				---	---	---	466	280	318	320	235	279
8				---	---	---	764	340	454	292	249	276
9				---	---	---	405	307	355	287	259	276
10				---	---	---	392	245	289	300	285	295
11				553	278	339	317	292	305	305	298	301
12				352	258	293	308	181	265	320	300	304
13				286	214	238	315	146	237	332	324	329
14				277	252	262	339	256	292	332	327	330
15				286	277	281	317	222	262	336	331	333
16				278	233	251	314	260	278	340	215	297
17				280	240	255	283	265	276	271	232	256
18				317	269	283	311	245	285	317	273	290
19				380	321	352	299	279	284	323	297	307
20				402	220	338	304	289	297	321	224	299
21				327	290	309	309	302	305	285	230	272
22				---	---	---	315	296	306	310	216	275
23				---	---	---	306	288	298	251	226	241
24				---	---	---	301	262	279	272	248	260
25				---	---	---	303	279	289	283	268	276
26				275	185	231	305	292	295	291	275	280
27				276	261	265	322	283	301	286	278	281
28				296	274	282	305	298	300	301	278	286
29				305	285	291	314	298	303	276	260	265
30				309	294	299	316	305	309	277	260	267
31				321	307	313	315	239	302	---	---	---
MONTH				553	185	287	764	146	301	340	187	287
YEAR	764	146	292									

TEMPERATURE, WATER (DEG. C), JULY TO SEPTEMBER 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		JUNE			JULY			AUGUST			SEPTEMBER	
1				---	---	---	13.5	10.5	12.0	13.0	11.5	12.0
2				---	---	---	14.0	11.5	12.5	13.5	10.5	12.0
3				---	---	---	13.5	11.5	13.0	14.0	12.0	13.0
4				---	---	---	13.0	11.5	12.5	13.5	11.5	12.5
5				---	---	---	13.0	11.0	12.0	14.0	11.0	12.5
6				---	---	---	13.0	11.0	12.0	13.5	11.0	12.5
7				---	---	---	13.0	10.5	11.5	15.0	12.5	14.0
8				---	---	---	12.0	10.5	11.0	14.0	13.0	13.5
9				---	---	---	12.0	10.0	11.0	15.0	12.5	14.5
10				---	---	---	12.0	11.5	12.0	14.5	11.0	12.5
11				17.0	12.0	14.5	13.0	10.5	11.5	14.0	11.0	12.5
12				15.0	13.0	14.0	12.0	10.5	11.0	---	---	---
13				13.0	11.5	12.5	11.0	9.0	10.0	13.5	10.5	12.0
14				15.5	10.5	13.0	11.0	8.5	9.5	13.5	10.0	11.5
15				14.0	12.0	12.5	14.0	9.0	10.5	13.0	10.5	12.0
16				13.5	11.5	12.0	14.0	7.0	10.0	15.0	12.5	14.0
17				16.0	11.0	13.0	13.0	7.5	10.0	14.5	10.5	12.5
18				15.0	12.5	14.0	11.5	9.5	10.0	11.5	8.5	10.0
19				18.5	13.0	15.5	11.5	9.0	10.0	9.0	8.0	8.5
20				16.5	14.5	15.5	12.5	9.0	11.0	11.5	8.5	9.5
21				16.0	11.5	14.0	13.5	10.5	12.0	10.0	8.5	9.5
22				---	---	---	13.5	11.0	12.0	9.0	7.5	8.0
23				---	---	---	12.0	9.5	10.0	7.0	4.5	6.0
24				---	---	---	10.5	9.0	10.0	5.0	3.0	4.0
25				---	---	---	10.0	9.5	9.5	4.5	2.5	3.5
26				15.0	11.0	13.0	10.5	9.5	10.0	4.5	1.5	3.0
27				15.0	10.0	12.5	12.5	10.0	11.0	4.5	3.5	4.0
28				15.5	10.5	13.0	12.5	10.5	11.5	5.5	4.0	5.0
29				15.5	11.5	13.5	12.5	10.5	11.5	7.0	5.0	6.0
30				14.0	11.0	12.5	12.0	11.0	11.5	8.5	6.5	7.5
31				12.5	11.0	11.5	13.5	10.5	11.5	---	---	---
MONTH				18.5	10.0	13.5	14.0	7.0	11.0	15.0	1.5	10.0
YEAR	18.5	1.5	11.0									

15274550 LITTLE CAMPBELL CREEK AT NATHAN DRIVE NEAR ANCHORAGE--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), JULY TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCENTRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	.96	---	---	1.5	18	.07	7.9	119	4.0
2	1.0	---	---	1.7	20	.09	7.0	63	1.6
3	1.0	---	---	1.4	18	.07	3.7	12	.12
4	.95	---	---	1.8	30	.15	2.6	10	.07
5	.90	---	---	1.8	28	.14	2.5	20	.14
6	1.0	---	---	2.0	28	.15	2.3	35	.22
7	1.2	---	---	2.1	20	.11	6.7	90	2.3
8	1.0	---	---	2.7	28	.20	7.3	67	1.8
9	.89	---	---	1.9	12	.06	6.4	41	.81
10	.65	---	---	4.1	101	1.6	4.0	10	.11
11	.46	---	---	2.7	28	.20	3.1	10	.08
12	.76	---	---	6.2	279	6.1	2.8	10	.08
13	3.3	---	---	17	454	31	2.6	8	.06
14	1.9	---	---	6.7	45	.81	2.3	6	.04
15	1.4	15	.06	6.9	87	2.3	2.3	7	.04
16	2.2	15	.09	5.9	45	.72	6.9	93	2.0
17	1.8	15	.07	4.3	30	.35	6.8	35	.64
18	1.3	15	.05	5.1	85	2.0	5.5	15	.22
19	.77	15	.03	4.0	25	.27	4.1	45	.50
20	4.4	117	3.6	3.4	20	.18	5.6	83	1.7
21	4.1	76	.90	3.1	25	.21	7.0	82	1.7
22	2.6	62	.59	3.1	25	.21	8.4	98	3.2
23	4.3	155	2.1	3.1	10	.08	14	108	4.9
24	2.4	20	.13	4.8	30	.44	8.5	40	.92
25	2.2	18	.11	4.2	24	.27	6.8	20	.37
26	4.3	38	.53	4.0	15	.16	5.8	15	.23
27	2.4	22	.14	4.0	15	.16	5.9	15	.24
28	1.9	20	.10	3.4	22	.20	5.2	15	.21
29	1.4	18	.07	3.0	15	.12	5.3	15	.21
30	1.3	18	.06	2.7	10	.07	5.6	45	.68
31	1.6	15	.06	3.6	25	.24	---	---	---
TOTAL	56.34	---	5.89	122.2	---	34.11	164.9	---	22.59
YEAR	432.24		62.59						

15274600 CAMPBELL CREEK NEAR SPENARD

LOCATION.--Lat 61°08'22", long 149°55'24", in SE¼ SE¼ sec.11, T.12 N., R.4 W., Municipality of Anchorage, Hydrologic Unit 19050002, on right bank 400 ft upstream of bridge at Dimond Boulevard, 2.1 mi upstream from mouth, and 4.3 mi south of Spenard. Prior to May 9, 1986, at site 400 ft downstream.

DRAINAGE AREA.--69.7 mi^2.

WATER-DISCHARGE RECORDS

RERIOD OF RECORD.--June 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1.68 ft above National Geodetic Vertical Datum of 1929. Prior to May 9, 1986, at site 400 ft downstream at datum 16.36 ft higher.

REMARKS.--Estimated daily discharges: Oct. 16-18, and Oct. 21 to May 8. Records good except for period of no gage-height record, Oct. 21 to May 8, and period with ice effect, Oct. 16-18, which are poor.

AVERAGE DISCHARGE.--20 years, 65.1 ft^3/s, 12.68 in/yr, 47,160 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 451 ft^3/s, Aug. 13, 1981, gage height, 3.54 ft, site and datum then in use; maximum gage height recorded, 5.29 ft at former site and datum, Apr. 20, 1976, backwater from ice; minimum daily discharge, 2.2 ft^3/s, Feb. 5, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 271 ft^3/s, Sept. 23, gage height, 20.07 ft; minimum daily, about 12 ft^3/s, Feb. 28 to Mar. 4.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	50	36	30	18	12	14	60	80	82	75	110
2	116	50	34	30	18	12	14	55	74	86	70	110
3	113	48	34	30	17	12	14	45	65	87	67	93
4	108	48	34	30	17	12	14	40	65	80	68	87
5	104	46	34	30	17	13	14	40	62	78	69	82
6	102	46	34	28	17	13	14	38	68	77	70	80
7	104	44	34	28	16	13	14	38	82	76	64	100
8	110	44	32	26	16	13	14	34	100	68	65	109
9	175	42	32	26	16	13	14	32	81	65	59	99
10	128	42	32	26	16	13	14	32	76	61	73	86
11	112	42	32	24	15	14	14	34	74	60	73	82
12	105	40	32	24	15	14	14	39	73	65	101	77
13	100	40	32	24	15	14	15	45	76	82	189	76
14	94	40	32	24	15	14	15	39	87	75	132	73
15	93	40	32	24	15	14	16	35	98	65	123	72
16	90	40	30	22	14	14	16	42	119	71	113	92
17	90	40	30	22	14	14	17	39	129	64	99	99
18	85	40	30	22	14	14	18	37	129	58	96	87
19	80	40	32	22	14	14	18	39	115	57	96	84
20	80	40	36	20	14	14	19	41	109	75	85	181
21	75	40	32	20	14	14	22	44	101	106	81	248
22	70	38	32	20	13	14	24	49	92	82	82	208
23	65	38	34	20	13	14	28	58	86	168	84	207
24	65	38	34	20	13	14	38	59	81	151	127	151
25	60	38	30	20	13	14	40	69	76	113	161	134
26	60	38	30	19	13	14	44	81	70	162	145	123
27	60	38	36	19	13	14	48	69	71	139	124	121
28	55	38	34	19	12	14	55	67	77	108	118	118
29	55	38	30	18	---	14	60	77	79	91	109	113
30	55	36	30	18	---	14	65	91	79	82	100	120
31	50	---	30	18	---	14	---	92	---	77	101	---
TOTAL	2779	1242	1006	723	417	420	726	1560	2574	2711	3019	3422
MEAN	89.6	41.4	32.5	23.3	14.9	13.5	24.2	50.3	85.8	87.5	97.4	114
MAX	175	50	36	30	18	14	65	92	129	168	189	248
MIN	50	36	30	18	12	12	14	32	62	57	59	72
CFSM	1.29	.59	.47	.33	.21	.19	.35	.72	1.23	1.26	1.40	1.64
IN.	1.48	.66	.54	.39	.22	.22	.39	.83	1.37	1.45	1.61	1.83
AC-FT	5510	2460	2000	1430	827	833	1440	3090	5110	5380	5990	6790

CAL YR 1985 TOTAL 24857 MEAN 68.1 MAX 250 MIN 13 CFSM .98 IN 13.27 AC-FT 49300

WTR YR 1986 TOTAL 20599 MEAN 56.4 MAX 248 MIN 12 CFSM .81 IN 10.99 AC-FT 40860

15274600 CAMPBELL CREEK NEAR SPENARD--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1960-61, 1967-73, 1975-77, 1980-81, and May to September 1986

PERIOD OF DAILY RECORD.--
SUSPENDED SEDIMENT: May to September 1986.

INSTRUMENTATION.--Automatic pumping sampler since May 1986, set to collect samples 2 to 6 times daily.

REMARKS.--Suspended-sediment samples were collected with a depth-integrating sampler, May 23, 29, 30, June 4, 16, July 10(2), 11, 12, 16, 20, 23, Aug. 30, Sept. 2, 18, to adjust concentration values obtained with pumping sampler. Unpublished suspended-sediment data for Campbell Creek below sewer outfall (15274606) for period May to September, 1986, are available in the files at the Anchorage Subdistrict Office. Size-analyses data and daily sediment discharge for Campbell Creek near Spenard (15274600) and Campbell Creek below sewer outfall (15274606) are published in U. S. Geological Survey Open-File Report 87-101.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATION: Maximum adjusted daily mean for period May to September, 302 mg/L, July 23; minimum adjusted daily mean, 2 mg/L, Aug. 23.
SEDIMENT DISCHARGE: Maximum daily for period May to September, 151 tons/day, July 23; minimum daily, 0.45 tons/day, Aug. 23.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
APR											
23...	1815	28	178	7.40	0.0	53	760	12.4	85	K32	K400
24...	1840	40	184	7.50	0.0	57	759	12.1	83	160	2100
JUN											
17...	1540	131	62	7.80	11.0	12	758	9.7	88	K6	76
SEP											
08...	1630	105	108	7.80	8.5	17	756	10.3	89	1300	2800

DATE	HARDNESS (MG/L AS CACO3) (00900)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)
APR											
23...	66	11	50	46	56	0	110	40	0.280	0.020	0.300
24...	60	14	50	48	58	0	116	94	0.280	0.020	0.300
JUN											
17...	27	0.90	25	24	30	0	45	51	--	<0.010	<0.100
SEP											
08...	46	2.7	38	37	45	0	60	38	--	<0.010	<0.100

DATE	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	ANTIMONY, TOTAL (UG/L AS SB) (01097)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)
APR											
23...	0.040	<1	2	<10	1	7	62	4400	36	<0.10	48
24...	0.040	1	3	<10	1	4	56	6500	40	<0.10	22
JUN											
17...	<0.010	<1	1	<10	<1	26	4	2100	<5	<0.10	3
SEP											
08...	0.010	<1	1	<10	<1	4	4	2300	7	<0.10	5

K NON IDEAL COLONY COUNT

15274600 CAMPBELL CREEK NEAR SPENARD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER. TOTAL RECOVERABLE (UG/L AS AG) (01077)	THALLIUM, TOTAL (UG/L AS TL) (01059)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
APR										
23...	<1	<1	<1	170	9.2	<0.010	<1	73	5.5	--
24...	<1	<1	<1	250	13	<0.010	<1	131	14	--
JUN										
17...	<1	<1	<1	30	3.5	<0.010	<1	86	30	--
SEP										
08...	<1	<1	<1	60	5.6	<0.010	<1	43	12	85

DATE	TIME	DICHLOROBROMOMETHANE TOTAL (UG/L) (32101)	CARBONTETRACHLORIDE TOTAL (UG/L) (32102)	1,2-DICHLOROETHANE TOTAL (UG/L) (32103)	BROMOFORM TOTAL (UG/L) (32104)	CHLORODIBROMOMETHANE TOTAL (UG/L) (32105)	CHLOROFORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACENAPHTHYLENE TOTAL (UG/L) (34200)	ACENAPHTHENE TOTAL (UG/L) (34205)	ANTHRACENE TOTAL (UG/L) (34220)
APR												
24...	1840	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0
JUN												
17...	1540	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0
SEP												
08...	1630	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0

DATE	BENZO B FLUORANTHENE TOTAL (UG/L) (34230)	BENZO K FLUORANTHENE TOTAL (UG/L) (34242)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	DELTA BENZENE HEXACHLORIDE TOTAL (UG/L) (34259)	BIS 2-CHLOROETHYL ETHER TOTAL (UG/L) (34273)	BIS (2-CHLOROETHOXY) METHANE TOTAL (UG/L) (34278)	BIS (2-CHLOROISOPROPYL) ETHER TOTAL (UG/L) (34283)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L) (34292)	CHLOROBENZENE TOTAL (UG/L) (34301)	CHLOROETHANE TOTAL (UG/L) (34311)	CHRYSENE TOTAL (UG/L) (34320)	DIETHYL PHTHALATE TOTAL (UG/L) (34336)
APR												
24...	<10.0	<10.0	<10.0	--	<5.0	<5.0	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0
JUN												
17...	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0
SEP												
08...	<10.0	<10.0	<10.0	--	<5.0	<5.0	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0

DATE	DIMETHYL PHTHALATE TOTAL (UG/L) (34341)	ETHYLBENZENE TOTAL (UG/L) (34371)	FLUORANTHENE TOTAL (UG/L) (34376)	FLUORENE TOTAL (UG/L) (34381)	HEXACHLOROCYCLOPENTADIENE TOTAL (UG/L) (34386)	HEXACHLOROETHANE TOTAL (UG/L) (34396)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L) (34403)	ISOPHORONE TOTAL (UG/L) (34408)	METHYLBROMIDE TOTAL (UG/L) (34413)	METHYLCHLORIDE TOTAL (UG/L) (34418)	METHYLENE CHLORIDE TOTAL (UG/L) (34423)	N-NITROSODI-N-PROPYLAMINE TOTAL (UG/L) (34428)
APR												
24...	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0
JUN												
17...	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<0.20	<0.20	<2.0	<5.0
SEP												
08...	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<0.20	<0.20	<10	<5.0

DATE	N-NITROSODIPHENYLAMINE TOTAL (UG/L) (34433)	N-NITROSODIMETHYLAMINE TOTAL (UG/L) (34438)	NITROBENZENE TOTAL (UG/L) (34447)	PARACHLOROMETA CRESOL TOTAL (UG/L) (34452)	PHENANTHRENE TOTAL (UG/L) (34461)	PYRENE TOTAL (UG/L) (34469)	TETRACHLOROETHYLENE TOTAL (UG/L) (34475)	TRICHLOROFLUOROMETHANE TOTAL (UG/L) (34488)	1,1-DICHLOROETHANE TOTAL (UG/L) (34496)	1,1-DICHLOROETHYLENE TOTAL (UG/L) (34501)	1,1,1-TRICHLOROETHANE TOTAL (UG/L) (34506)	1,1,2-TRICHLOROETHANE TOTAL (UG/L) (34511)
APR												
24...	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
JUN												
17...	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
SEP												
08...	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

15274600 CAMPBELL CREEK NEAR SPENARD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	1,1,2,2 TETRACHLOROETHANE TOTAL (UG/L) (34516)	BENZOGH I PERYLENE1,12-BENZOPERYLENE TOTAL (UG/L) (34521)	BENZO A ANTHRACENE1,2-BENZANTHRACENE TOTAL (UG/L) (34526)	1,2-DICHLOROBENZENE TOTAL (UG/L) (34536)	1,2-DICHLOROPROPANE TOTAL (UG/L) (34541)	1,2-TRANSDICHLOROETHYLENE TOTAL (UG/L) (34546)	1,2,4-TRICHLOROBENZENE TOTAL (UG/L) (34551)	1,2,5,6-DIBENZ-ANTHRACENE TOTAL (UG/L) (34556)	1,3-DICHLOROPROPANE TOTAL (UG/L) (34561)	1,3-DICHLOROBENZENE TOTAL (UG/L) (34566)	1,4-DICHLOROBENZENE TOTAL (UG/L) (34571)	2-CHLOROETHYLVINYLETHER TOTAL (UG/L) (34576)
APR 24...	<0.20	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<10.0	<0.20	<0.20	<0.20	<0.20
JUN 17...	<0.20	<10.0	<10.0	<0.20	<0.20	<0.20	<5.0	<10.0	<0.20	<0.20	<0.20	<0.20
SEP 08...	<0.20	<10.0	<10.0	<0.20	<0.20	<0.20	<5.0	<10.0	<0.20	<0.20	<0.20	<0.20

DATE	2-CHLORONAPHTHALENE TOTAL (UG/L) (34581)	2-CHLOROPHENOL TOTAL (UG/L) (34586)	2-NITROPHENOL TOTAL (UG/L) (34591)	DI-N-OCTYL PHTHALATE TOTAL (UG/L) (34596)	2,4-DICHLOROPHENOL TOTAL (UG/L) (34601)	2,4-DIMETHYLPHENOL TOTAL (UG/L) (34606)	2,4-DINITROTOLUENE TOTAL (UG/L) (34611)	2,4,-DINITROPHENOL TOTAL (UG/L) (34616)	2,4,6-TRICHLOROPHENOL TOTAL (UG/L) (34621)	2,6-DINITROTOLUENE TOTAL (UG/L) (34626)	4-BROMOPHENYL PHENYL ETHER TOTAL (UG/L) (34636)
APR 24...	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<5.0
JUN 17...	<5.0	<6.0	<6.0	<10.0	<6.0	<6.0	<5.0	<20.0	<5.0	<5.0	<5.0
SEP 08...	<5.0	<6.0	<6.0	<10.0	<6.0	<6.0	<5.0	<20.0	<5.0	<5.0	<5.0

DATE	4-CHLOROPHENYL PHENYL ETHER TOTAL (UG/L) (34641)	4-NITROPHENOL TOTAL (UG/L) (34646)	4,6-DINITRO-ORTHOCRESOL TOTAL (UG/L) (34657)	DICHLORODIFLUOROMETHANE TOTAL (UG/L) (34668)	AROCLOR 1016 PCB TOTAL (UG/L) (34671)	PHENOL (C6H5OH) TOTAL (UG/L) (34694)	NAPHTHALENE TOTAL (UG/L) (34696)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L) (34699)	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L) (34704)	PENTACHLOROPHENOL TOTAL (UG/L) (39032)	PERTHANE TOTAL (UG/L) (39034)
APR 24...	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0	<5.0	<0.20	<0.20	<30.0	<0.1
JUN 17...	<5.0	<30.0	<30.0	<0.20	<0.1	<6.0	<5.0	<0.20	<0.20	<30.0	<0.1
SEP 08...	<5.0	<30.0	<30.0	<0.20	<0.1	<6.0	<5.0	<0.20	<0.20	<30.0	<0.1

DATE	BIS(2- 1,2-DIBROMOETHYLENE TOTAL (UG/L) (39082)	ETHYLHEXYL) PHTHALATE TOTAL (UG/L) (39100)	DI-N-BUTYL PHTHALATE TOTAL (UG/L) (39110)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRICHLOROETHYLENE TOTAL (UG/L) (39180)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L) (39250)	ALDRIN, TOTAL (UG/L) (39330)	BETA ALPHA BHC TOTAL (UG/L) (39337)	BENZENE HEXACHLORIDE TOTAL (UG/L) (39338)	LINDANE TOTAL (UG/L) (39340)	CHLORDANE, TOTAL (UG/L) (39350)
APR 24...	<0.2	<5.0	<5.0	<0.20	<0.2	<0.10	<0.010	--	--	<0.010	<0.1
JUN 17...	<0.2	<5.0	<5.0	<0.20	<0.2	<0.10	<0.010	<0.01	<0.01	<0.010	<0.1
SEP 08...	<0.2	<5.0	<5.0	<0.20	<0.2	<0.10	<0.010	--	--	<0.010	<0.1

DATE	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DIELDRIN TOTAL (UG/L) (39380)	ENDOSULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	TOXAPHENE, TOTAL (UG/L) (39400)	HEPTACHLOR, TOTAL (UG/L) (39410)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	METHOXYCHLOR, TOTAL (UG/L) (39480)	AROCLOR 1221 PCB TOTAL (UG/L) (39488)
APR 24...	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.01	<0.1
JUN 17...	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.01	<0.1
SEP 03...	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.01	<0.1

15274600 CAMPBELL CREEK NEAR SPENARD--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	AROCLOR 1232 PCB TOTAL (UG/L) (39492)	AROCLOR 1242 PCB TOTAL (UG/L) (39496)	AROCLOR 1248 PCB TOTAL (UG/L) (39500)	AROCLOR 1254 PCB TOTAL (UG/L) (39504)	AROCLOR 1260 PCB TOTAL (UG/L) (39508)	PCB, TOTAL (UG/L) (39516)	HEXA-CHLORO-BENZENE TOTAL (UG/L) (39700)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L) (39702)	MIREX, TOTAL (UG/L) (39755)	STYRENE TOTAL (UG/L) (77128)	XYLENE WATER WHOLE TOT REC (UG/L) (81551)
APR											
24...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.01	<0.2	--
JUN											
17...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.01	<0.2	--
SEP											
08...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.01	<0.2	<0.2

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), MAY TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1				60	37	6.0	80	25	5.4
2				55	34	5.0	74	20	4.0
3				45	33	4.0	65	14	2.5
4				40	28	3.0	65	14	2.5
5				40	23	2.5	62	11	1.8
6				38	24	2.5	68	16	2.9
7				38	24	2.5	82	22	4.9
8				34	22	2.0	100	36	9.7
9				32	22	1.9	81	11	2.4
10				32	22	1.9	76	11	2.3
11				34	20	1.8	74	11	2.2
12				39	22	2.3	73	14	2.8
13				45	22	2.7	76	16	3.3
14				39	18	1.9	87	25	5.9
15				35	20	1.9	98	34	9.0
16				42	22	2.5	119	99	32
17				39	18	1.9	129	117	41
18				37	18	1.8	129	70	24
19				39	18	1.9	115	31	9.6
20				41	22	2.4	109	27	7.9
21				44	27	3.2	101	18	4.9
22				49	29	3.8	92	13	3.2
23				58	38	6.0	86	14	3.3
24				59	36	5.7	81	13	2.8
25				69	56	10	76	9	1.8
26				81	86	19	70	7	1.3
27				69	27	5.0	71	7	1.3
28				67	25	4.5	77	7	1.5
29				77	40	8.3	79	9	1.9
30				91	70	17	79	11	2.3
31				92	59	15	---	---	---
TOTAL				1560	---	149.9	2574	---	200.4

15274600 CAMPBELL CREEK NEAR SPENARD--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), MAY 1985 TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN- TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	82	13	2.9	75	4	.81	110	39	12
2	86	14	3.3	70	4	.76	110	54	17
3	87	14	3.3	67	5	.90	93	16	4.0
4	80	11	2.4	68	5	.92	87	11	2.6
5	78	9	1.9	69	7	1.3	82	9	2.0
6	77	9	1.9	70	11	2.1	80	7	1.5
7	76	13	2.7	64	5	.86	100	35	11
8	68	11	2.0	65	11	1.9	109	29	8.5
9	65	9	1.6	59	9	1.4	99	25	6.7
10	61	9	1.5	73	14	2.8	86	11	2.6
11	60	9	1.5	73	11	2.2	82	9	2.0
12	65	14	2.5	101	56	18	77	9	1.9
13	82	25	5.5	189	227	130	76	7	1.4
14	75	14	2.8	132	52	19	73	7	1.4
15	65	9	1.6	123	68	23	72	5	.97
16	71	11	2.1	113	40	12	92	24	6.0
17	64	9	1.6	99	22	5.9	99	22	5.9
18	58	7	1.1	96	29	7.5	87	13	3.1
19	57	7	1.1	96	16	4.1	84	13	2.9
20	75	87	24	85	11	2.5	181	171	103
21	106	66	19	81	4	.87	248	101	68
22	82	23	5.1	82	7	1.5	208	61	34
23	168	302	151	84	2	.45	207	121	72
24	151	92	38	127	24	9.2	151	38	15
25	113	44	13	161	31	13	134	30	11
26	162	65	29	145	29	11	123	44	15
27	139	18	6.8	124	22	7.4	121	20	6.5
28	108	12	3.5	118	18	5.7	118	14	4.5
29	91	11	2.7	109	16	4.7	113	7	2.1
30	82	7	1.5	100	11	3.0	120	18	5.8
31	77	5	1.0	101	11	3.0	---	---	---
TOTAL	2711	---	337.9	3019	---	297.77	3422	---	430.37

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE

LOCATION.--Lat 61°12'19", long 149°53'43", on line between sec.19, R.3 W., and sec.24, R.4 W., T.13 N., Municipality of Anchorage, Hydrologic Unit 19050002, on upstream right bank wingwall of bridge on Arctic Boulevard in Anchorage and 0.8 mi upstream from mouth.

DRAINAGE AREA.--27.2 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1966 to April 1986 (discontinued).

REVISED RECORDS.--WRD Alaska 1972: Drainage area. WDR AK-82-1: 1979(M), 1981(M).

GAGE.--Water-stage recorder and culvert control. Datum of gage is 16.02 ft above National Geodetic Vertical Datum of 1929 (from USC&GS, datum of 1968).

REMARKS.--Estimated daily discharges: Oct. 26 to Mar. 31. Records good except for period of no gage-height record, Oct. 26 to Mar. 31, which is poor.

AVERAGE DISCHARGE.--19 years (water years 1967-85), 18.2 ft³/s, 9.09 in/yr, 13,190 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 175 ft³/s, Sept. 11, 1975, gage height, 4.37 ft; minimum daily, about 1.6 ft³/s, Feb. 12-14, 1975.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period October 1985 to April 1986, 148 ft³/s, Oct. 9, gage height, 5.34 ft; minimum daily, about 10 ft³/s, Feb. 24-28.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1985 TO APRIL 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	31	18	14	14	14	11	12					
2	30	18	14	14	14	11	12					
3	30	20	14	14	14	12	12					
4	29	20	14	14	12	12	12					
5	29	20	16	12	12	12	12					
6	28	20	16	12	12	12	12					
7	31	20	16	12	14	12	12					
8	42	18	16	12	14	12	12					
9	82	18	18	12	12	12	12					
10	38	16	20	12	12	12	12					
11	33	16	18	12	12	12	12					
12	31	16	18	12	12	12	---					
13	30	16	18	12	12	14	---					
14	29	18	20	12	12	14	---					
15	29	18	20	12	12	14	---					
16	31	18	22	12	11	14	---					
17	29	20	22	12	11	14	---					
18	29	20	24	12	11	14	---					
19	26	20	26	12	11	14	---					
20	24	20	36	12	11	14	---					
21	24	20	26	12	11	14	---					
22	25	20	26	12	11	14	---					
23	23	18	30	12	11	14	---					
24	21	18	56	12	10	14	---					
25	20	18	30	12	10	12	---					
26	18	16	24	12	10	12	---					
27	18	16	22	12	10	12	---					
28	18	16	22	12	10	12	---					
29	18	14	20	12	---	12	---					
30	18	14	16	12	---	12	---					
31	18	---	16	12	---	12	---					
TOTAL	882	540	670	380	328	394	---					
MEAN	28.5	18.0	21.6	12.3	11.7	12.7	---					
MAX	82	20	56	14	14	14	---					
MIN	18	14	14	12	10	11	---					
CFSM	1.05	.66	.79	.45	.43	.47	---					
IN.	1.21	.74	.92	.52	.45	.54	---					
AC-FT	1750	1070	1330	754	651	781	---					

CAL YR 1985 TOTAL 7395.8 MEAN 20.3 MAX 86 MIN 6.0 CFSM .75 IN 10.11 AC-FT 14670

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1967-73, 1975-77, and 1980 to March 1986 (discontinued).

PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: October 1981 to March 1986.
WATER TEMPERATURE: October 1981 to March 1986.

INSTRUMENTATION.--Water-quality monitor since October 1981. Digital recorder set for fifteen-minute recording interval.

REMARKS.--Interruptions in record were due to malfunction of the recording instruments and frozen probe. Records represent specific conductence and water temperature at the sensors within 10 microsiemens and 0.5°C respectively. Conductivity at the sensor was compared with the average for the creek by cross sections on Oct. 17 and Feb. 10 and showed a maximum difference of 2 microsiemens. A maximum variation of 3 microsiemens was found within the cross sections. Temperature at the sensor was compared with the average for the creek by cross section on Oct. 17 and showed no difference. No variation was found within the cross section.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SPECIFIC CONDUCTANCE: Maximum, 1,390 microsiemens, Feb. 8, 1986; minimum, 48 microsiemens, Aug. 14, 1983.
WATER TEMPERATURE: Maximum, 19.5°C, July 6, 1985; minimum, 0.0°C, on many days during winter months.

EXTREMES FOR CURRENT PERIOD.--October 1985 to March 1986.
SPECIFIC CONDUCTANCE: Maximum recorded for period, 1,390 microsiemens, Feb. 8; minimum recorded, 75 microsiemens, Oct. 9.
WATER TEMPERATURE: Maximum for period, 7.5°C, Oct. 1; minimum, 0.0°C, many days during winter period.

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, OCTOBER 1985 TO MARCH 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	285	230	249	290	270	282	270	250	260	301	281	288
2	285	255	265	284	264	274	270	260	262	290	280	282
3	275	255	261	278	258	268	390	250	307	298	268	273
4	265	245	254	272	252	262	270	250	261	856	306	551
5	275	245	257	266	246	258	260	250	258	364	314	326
6	305	255	278	310	250	273	270	250	259	312	292	305
7	275	245	257	305	225	265	270	250	261	309	290	299
8	275	115	232	241	211	231	270	250	262	308	298	300
9	215	75	166	236	216	221	600	250	347	307	287	299
10	235	205	223	282	212	239	540	330	402	296	286	288
11	245	225	238	327	247	282	665	355	466	285	275	281
12	---	245	---	372	252	312	699	499	612	285	275	278
13	---	---	---	388	178	254	504	404	445	274	264	269
14	---	---	---	193	173	183	418	368	394	273	263	265
15	---	---	---	198	178	192	473	403	447	272	252	261
16	---	---	---	194	174	186	448	418	432	271	261	261
17	---	---	---	189	169	178	432	392	417	270	260	267
18	---	---	---	205	175	187	407	357	384	271	261	270
19	---	---	---	310	190	248	892	392	552	272	262	263
20	---	---	---	350	230	280	776	586	634	263	253	263
21	---	---	---	300	250	276	581	501	529	273	263	264
22	---	---	---	260	250	256	495	435	468	274	254	263
23	---	---	---	260	250	254	---	---	---	265	245	258
24	---	---	---	260	240	252	---	---	---	256	246	255
25	---	---	---	260	240	251	359	339	350	277	257	263
26	---	---	---	260	250	256	368	328	341	268	258	261
27	---	---	---	260	250	254	747	317	361	278	258	265
28	---	---	---	270	250	262	526	346	399	279	259	272
29	---	---	---	280	250	266	344	304	324	280	260	270
30	---	---	---	260	250	257	323	293	306	---	---	---
31	290	270	281	---	---	---	302	282	295	---	---	---
MONTH				388	169	249	892	250	381	856	245	285

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

SPECIFIC CONDUCTANCE, MICROSIEMENS PER CENTIMETER AT 25, OCTOBER 1985 TO MARCH 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	---	---	---	---	---	---						
2	---	---	---	---	---	---						
3	---	---	---	---	---	---						
4	---	---	---	---	---	---						
5	---	---	---	---	---	---						
6	---	---	---	---	---	---						
7	---	---	---	---	---	---						
8	1390	---	---	---	---	---						
9	949	289	446	---	---	---						
10	300	260	275	---	---	---						
11	270	260	264	---	---	---						
12	320	260	278	---	---	---						
13	300	260	281	---	---	---						
14	290	260	274	---	---	---						
15	280	260	271	---	---	---						
16	290	260	271	---	---	---						
17	280	250	268	---	---	---						
18	280	260	269	---	---	---						
19	280	260	273	454	304	370						
20	270	260	267	438	308	367						
21	270	260	266	463	313	380						
22	280	250	268	457	327	400						
23	290	250	273	421	331	372						
24	---	---	---	425	335	371						
25	---	---	---	1010	369	620						
26	---	---	---	774	374	460						
27	---	---	---	528	358	416						
28	---	---	---	592	382	465						
29	---	---	---	506	336	415						
30	---	---	---	411	341	365						
31	---	---	---	415	345	384						

TEMPERATURE, WATER (DEG. C), OCTOBER 1985 TO MARCH 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		OCTOBER			NOVEMBER			DECEMBER			JANUARY	
1	7.5	6.0	6.5	.0	.0	.0	.0	.0	.0	1.5	.0	1.0
2	7.0	6.0	6.5	.0	.0	.0	.0	.0	.0	.0	.0	.0
3	6.5	5.0	6.0	.0	.0	.0	.5	.0	.0	2.5	.0	.5
4	6.5	4.5	5.5	.0	.0	.0	.5	.0	.0	2.0	1.0	1.5
5	6.0	3.5	4.5	.0	.0	.0	.5	.5	.5	1.0	1.0	1.0
6	5.5	4.5	5.0	.5	.0	.0	.5	.0	.5	1.5	.5	1.0
7	6.0	5.0	5.5	.0	.0	.0	.5	.0	.5	.5	.0	.0
8	6.5	5.0	5.5	.0	.0	.0	.5	.5	.5	.0	.0	.0
9	6.0	5.0	5.5	.0	.0	.0	.5	.5	.5	.0	.0	.0
10	6.0	5.0	5.5	.0	.0	.0	.5	.5	.5	.0	.0	.0
11	5.5	4.5	5.0	1.0	.0	.5	2.0	1.0	1.5	.0	.0	.0
12	5.5	4.0	4.5	1.0	.5	1.0	1.5	.5	1.5	.0	.0	.0
13	5.0	4.0	4.0	.5	.0	.0	.5	.5	.5	.5	.0	.0
14	4.0	3.0	3.5	.0	.0	.0	.5	.5	.5	.0	.0	.0
15	4.5	3.0	4.0	.0	.0	.0	.5	.0	.5	.0	.0	.0
16	5.0	4.0	4.5	.0	.0	.0	1.0	.0	.5	.0	.0	.0
17	4.5	3.5	4.0	.0	.0	.0	1.0	.5	1.0	.0	.0	.0
18	4.0	2.5	3.5	.0	.0	.0	1.0	.0	.5	.0	.0	.0
19	3.0	1.5	2.0	.0	.0	.0	1.5	.5	1.0	.0	.0	.0
20	3.0	1.5	2.0	.0	.0	.0	1.5	.5	1.0	.0	.0	.0
21	3.0	2.0	2.5	.0	.0	.0	2.0	1.5	1.5	.0	.0	.0
22	2.5	1.5	2.5	.0	.0	.0	2.0	1.5	1.5	.0	.0	.0
23	2.0	.5	1.5	.0	.0	.0	2.0	.5	1.5	.0	.0	.0
24	1.5	.5	1.0	.0	.0	.0	1.5	.5	1.0	.0	.0	.0
25	1.0	.5	.5	.0	.0	.0	1.0	.5	1.0	.0	.0	.0
26	1.0	.5	1.0	.0	.0	.0	1.5	1.0	1.5	.0	.0	.0
27	1.5	.5	1.0	.0	.0	.0	2.0	1.5	2.0	.0	.0	.0
28	1.5	1.0	1.0	.0	.0	.0	2.0	1.5	2.0	.0	.0	.0
29	1.0	.5	.5	.0	.0	.0	2.0	.5	1.5	.0	.0	.0
30	.5	.0	.5	.0	.0	.0	1.5	.5	1.0	.0	.0	.0
31	.0	.0	.0	---	---	---	1.5	.5	1.0	.0	.0	.0
MONTH	7.5	.0	3.5	1.0	.0	.0	2.0	.0	1.0	2.5	.0	.0

15275100 CHESTER CREEK AT ARCTIC BOULEVARD AT ANCHORAGE--Continued

TEMPERATURE, WATER (DEG. C), OCTOBER 1985 TO MARCH 1986

DAY	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN	MAX	MIN	MEAN
		FEBRUARY			MARCH			APRIL			MAY	
1	.0	.0	.0	.0	.0	.0						
2	.0	.0	.0	.0	.0	.0						
3	.0	.0	.0	.0	.0	.0						
4	.0	.0	.0	.0	.0	.0						
5	.0	.0	.0	.0	.0	.0						
6	.0	.0	.0	---	---	---						
7	.0	.0	.0	---	---	---						
8	1.0	.0	.0	---	---	---						
9	.0	.0	.0	---	---	---						
10	.5	.0	.0	---	---	---						
11	.5	.0	.0	---	---	---						
12	.0	.0	.0	---	---	---						
13	.0	.0	.0	---	---	---						
14	.0	.0	.0	---	---	---						
15	.0	.0	.0	---	---	---						
16	.0	.0	.0	---	---	---						
17	.0	.0	.0	---	---	---						
18	.0	.0	.0	1.0	.5	.5						
19	.0	.0	.0	1.0	.0	.5						
20	.0	.0	.0	1.0	.0	.5						
21	.0	.0	.0	1.5	.0	.5						
22	.0	.0	.0	2.0	.5	1.0						
23	.0	.0	.0	1.5	.0	.5						
24	.0	.0	.0	2.0	.5	1.0						
25	.0	.0	.0	1.5	.5	.5						
26	.0	.0	.0	1.0	.0	.5						
27	.0	.0	.0	1.5	.0	1.0						
28	.0	.0	.0	1.5	.0	.5						
29	---	---	---	.0	.0	.0						
30	---	---	---	.0	.0	.0						
31	---	---	---	.0	.0	.0						
MONTH	1.0	.0	.0	2.0	.0	.5						

15276000 SHIP CREEK NEAR ANCHORAGE

LOCATION.--Lat 61°13'32", long 149°38'06", in SW¼SE¼ sec.9, T.13 N., R.2 W., Municipality of Anchorage, Hydrologic Unit 19050002, in Fort Richardson Military Reservation, on left bank, 800 ft downstream from diversion dam, 3.3 mi upstream from North Fork Ship Creek, and 7.8 miles east of intersection of Seward and Glenn Highways in Anchorage.

DRAINAGE AREA.--90.5 mi².

PERIOD OF RECORD.--October 1946 to current year.

REVISED RECORDS.--WSP 1936: Drainage area.

GAGE.--Water-stage recorder. Elevation of gage is 490 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 22, 1985, water-stage recorder at dam 800 ft upstream. See WSP 1936 for history of changes prior to Oct. 1, 1954.

REMARKS.--Estimated daily discharges: Oct. 23 to Dec. 22, Dec. 27 to Mar. 18, Mar. 29 to Apr. 10, and Apr. 21-25. Records good except for periods with ice effect, Oct. 23-25, Dec. 27 to Mar. 18, and Apr. 21-25, and periods of no gage-height record, Oct. 26 to Dec. 22 and Mar. 29 to Apr. 10, which are poor. Discharge data represent the net flow remaining after diversion for water supply to Fort Richardson, Elmendorf Air Force Base, and Municipality of Anchorage. Average diversion for water year 1986 was 24.4 ft³/s. Diversion began in 1944. Magnitude of discharges downstream of dam may be affected by periodic spillway adjustment.

COOPERATION.--Gage inspected and records of diversion provided by Office of Post Engineers, Fort Richardson.

AVERAGE DISCHARGE.--40 years, 161 ft³/s, 24.16 in/yr, 116,600 acre-ft/yr, adjusted to include diversion.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,860 ft³/s, June 21, 1949, gage height, 3.44 ft, site and datum then in use; no flow at times.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 622 ft³/s, Sept. 20, gage height, 5.60 ft; minimum, about 2.1 ft³/s. Mar. 29, result of temporary spillway adjustment.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	247	95	48	35	22	12	12	42	260	251	150	214
2	239	95	48	35	22	12	12	46	219	251	140	201
3	222	95	46	40	20	12	12	43	190	226	137	184
4	219	90	46	40	20	12	12	36	180	226	134	171
5	193	90	44	40	20	12	12	46	170	226	129	161
6	190	85	44	35	20	12	12	45	197	226	120	149
7	187	85	42	30	20	12	12	49	268	204	111	158
8	193	85	42	30	22	12	12	44	311	180	110	172
9	204	80	42	28	22	12	12	40	252	163	107	183
10	187	80	42	28	22	12	12	41	226	145	119	163
11	177	80	44	28	22	12	14	49	211	139	119	152
12	165	80	46	28	22	12	13	54	226	156	141	146
13	151	75	46	26	20	12	13	67	238	172	206	141
14	146	75	48	26	20	12	12	66	299	157	170	134
15	143	70	50	26	20	12	9.5	66	334	142	169	128
16	143	70	50	26	20	12	11	71	456	151	163	131
17	141	65	55	24	18	12	11	74	507	135	150	152
18	136	65	55	24	18	12	11	79	457	127	144	157
19	109	60	80	22	18	12	8.7	85	394	128	146	157
20	136	60	150	22	18	12	8.3	97	346	176	130	448
21	151	60	90	22	16	12	7.5	115	300	225	127	549
22	127	60	60	20	16	14	6.5	141	274	197	130	482
23	120	55	71	20	16	14	7.0	150	255	265	136	448
24	120	55	77	20	16	16	8.0	161	226	223	220	333
25	120	55	65	20	14	14	9.0	200	204	194	238	281
26	110	55	60	20	14	19	9.5	219	197	265	252	248
27	110	50	54	20	14	14	15	208	204	214	269	243
28	110	50	48	20	14	14	21	226	223	196	290	225
29	100	50	44	20	---	10	28	260	223	175	259	215
30	100	50	40	22	---	12	37	294	223	167	237	210
31	100	---	35	22	---	12	---	274	---	159	218	---
TOTAL	4796	2120	1712	819	526	391	380.0	3388	8070	5861	5171	6736
MEAN	155	70.7	55.2	26.4	18.8	12.6	12.7	109	269	189	167	225
MAX	247	95	150	40	22	19	37	294	507	265	290	549
MIN	100	50	35	20	14	10	6.5	36	170	127	107	128
AC-FT	9510	4210	3400	1620	1040	776	754	6720	16010	11630	10260	13360

CAL YR 1985 TOTAL 52483.0 MEAN 144 MAX 813 MIN 8.5 AC-FT 104100
WTR YR 1986 TOTAL 39970.0 MEAN 110 MAX 549 MIN 6.5 AC-FT 79280

ADJUSTED TO INCLUDE DIVERSION

	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
MEAN	175	90.1	73.6	46.2	40.7	35.3	35.0	134	302	221	196	252
CFSM	1.93	1.00	0.81	0.51	0.45	0.39	0.39	1.48	3.33	2.44	2.17	2.78
IN.	2.22	1.15	0.94	0.59	0.47	0.45	0.43	1.70	3.72	2.81	2.49	3.10
AC-FT	10,730	5,540	4,520	2,840	2,260	2,170	2,080	8,220	17,950	13,570	12,030	14,980

CAL YR 1984 MEAN 165 CFSM 1.82 IN 24.77 AC-FT 119,600
WTR YR 1985 MEAN 134 CFSM 1.48 IN 20.08 AC-FT 96,910

15277600 EAST FORK EKLUTNA CREEK NEAR PALMER

LOCATION.--Lat 61°18'44", long 148°57'12", in SW¼SE¼ sec.8, T.14 N., R.3 E., Municipality of Anchorage, Hydrologic Unit 19050002, on left bank 2.4 mi upstream from confluence with West Fork, 3.1 mi upstream from Eklutna Lake and 20.5 mi south of Palmer.

DRAINAGE AREA.--38.2 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1960 to September 1962, June 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,080 ft above National Geodetic Vertical Datum of 1929, from topographic map. June 1960 to Sept. 1962, at site 0.2 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 16 to June 5. Records good below 500 ft^3/s and fair above except for period of ice effect, Oct. 16 to Nov. 10, and period of no gage-height record, Nov. 11 to June 5, which are poor. Recording rain gage at station, daily values of precipitation available from WATSTORE. Streamflow augmented by glaciers, which cover 19 percent of the basin.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,320 ft^3/s, Sept. 12, 1961, gage height, 3.86 ft, site and datum then in use, from rating curve extended above 610 ft^3/s; minimum daily, 10 ft^3/s, Mar. 5 to Apr. 20, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 663 ft^3/s, July 19, gage height, 8.19 ft; from rating curve extended above 490 ft^3/s on the basis of slope-area measurement of peak flow at gage height, 9.19 ft, for flood of Oct. 11, 1986; minimum daily, about 10 ft^3/s, Mar. 5 to Apr. 20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	105	27	25	21	19	12	10	15	200	406	361	220
2	99	27	25	21	19	12	10	16	170	425	457	206
3	95	27	25	21	19	11	10	17	140	441	558	186
4	92	27	25	21	19	11	10	18	120	493	514	174
5	88	27	25	21	19	10	10	18	120	525	416	169
6	85	26	24	21	18	10	10	19	137	464	363	163
7	82	26	24	21	18	10	10	20	177	390	327	178
8	81	26	24	21	17	10	10	22	214	371	321	255
9	81	26	24	21	17	10	10	23	164	395	363	190
10	80	26	24	21	17	10	10	26	152	423	389	143
11	78	26	23	20	17	10	10	28	152	463	355	134
12	76	26	23	20	17	10	10	30	167	497	365	129
13	74	26	23	20	16	10	10	32	190	507	269	134
14	71	26	23	20	16	10	10	34	197	457	226	147
15	68	26	23	20	16	10	10	38	295	418	216	165
16	66	25	23	20	15	10	10	42	392	385	212	240
17	60	25	23	20	15	10	10	46	418	387	230	303
18	50	25	23	20	14	10	10	50	383	462	223	268
19	45	25	23	20	14	10	10	54	364	513	197	221
20	40	25	23	20	14	10	10	60	364	620	203	431
21	36	25	22	20	14	10	11	68	322	583	218	260
22	32	25	22	20	14	10	11	76	244	542	289	192
23	30	25	22	20	14	10	12	84	267	592	250	153
24	29	25	22	20	13	10	12	100	239	485	253	126
25	28	25	22	20	13	10	12	110	227	431	279	114
26	28	25	22	20	13	10	12	110	268	417	462	103
27	28	25	22	20	13	10	12	120	299	368	572	102
28	28	25	22	20	13	10	13	120	337	390	446	97
29	28	25	22	20	---	10	14	140	335	397	325	95
30	28	25	22	20	---	10	14	170	378	381	256	96
31	28	---	22	20	---	10	---	190	---	346	229	---
TOTAL	1839	770	717	630	443	316	323	1896	7432	13974	10144	5394
MEAN	59.3	25.7	23.1	20.3	15.8	10.2	10.8	61.2	248	451	327	180
MAX	105	27	25	21	19	12	14	190	418	620	572	431
MIN	28	25	22	20	13	10	10	15	120	346	197	95
CFSM	1.55	.67	.61	.53	.41	.27	.28	1.60	6.49	11.8	8.56	4.71
IN.	1.79	.75	.70	.61	.43	.31	.31	1.85	7.24	13.61	9.88	5.25
AC-FT	3650	1530	1420	1250	879	627	641	3760	14740	27720	20120	10700

WTR YR 1986 TOTAL 43878 MEAN 120 MAX 620 MIN 10 CFSM 3.14 IN 42.73 AC-FT 87030

15277600 EAST FORK EKLUTNA CREEK NEAR PALMER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1985 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: June 1985 to current year (seasonal).

INSTRUMENTATION.--Automatic pumping sampler since June 1985, set to collect samples three times daily.

REMARKS.--Suspended-sediment samples were collected with a depth-integrating sampler, June 6, 24, July 9, 23, 31, Aug. 14, 29, and Sept. 12, to adjust concentration values obtained with pumping sampler. Unpublished bedload and hourly air temperature data are available in the files at the Anchorage Subdistrict office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATION: Maximum adjusted daily mean, 2,070 mg/l, Sept. 20, 1986; minimum adjusted daily mean, 11 mg/l, Sept. 26-30, 1985.

SEDIMENT DISCHARGE: Maximum daily, 2,860 tons/day, Sept. 20, 1986; minimum daily, 3.3 tons/day, Sept. 26 and 30, 1985.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATION: Maximum adjusted daily mean for period June to September, 2,070 mg/L, Sept. 20. minimum adjusted daily mean, 15 mg/L, June 1-6.

SEDIMENT DISCHARGE: Maximum daily for period June to September, 2,860 tons/day, Sept. 20; minimum daily, 4.9 tons/day, June 4, 5.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT								
24...	1600	26.0	29	-11.5	0.0	6	0.47	--
MAR								
06...	1220	21.5	11	--	0.0	2	0.06	--
APR								
11...	1200	22.5	9.9	1.0	1.5	4	0.11	--
MAY								
16...	1350	30.0	45	12.5	7.0	8	0.97	--
JUN								
06...	1320	48.0	139	12.0	6.5	10	3.8	--
24...	1220	53.5	226	12.0	4.5	59	36	--
JUL								
09...	1600	56.0	383	--	--	270	279	--
23...	1620	76.5	579	--	--	404	632	64
31...	1000	54.0	326	9.0	4.5	80	70	80
AUG								
14...	1045	47.0	216	8.0	4.0	56	33	81
29...	1330	53.0	297	13.5	4.0	136	109	78
SEP								
12...	0945	45.0	121	5.5	3.5	19	6.2	65

15277600 EAST FORK EKLUTNA CREEK NEAR PALMER--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), JUNE TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1							200	15	8.1
2							170	15	6.9
3							140	15	5.7
4							120	15	4.9
5							120	15	4.9
6							137	15	5.5
7							177	20	9.6
8							214	70	40
9							164	25	11
10							152	22	9.0
11							152	20	8.2
12							167	20	9.0
13							190	22	11
14							197	50	27
15							295	118	94
16							392	300	318
17							418	370	417
18							383	280	289
19							364	60	59
20							364	60	59
21							322	60	52
22							244	60	40
23							267	60	43
24							239	60	39
25							227	60	37
26							268	60	43
27							299	60	48
28							337	120	109
29							335	150	136
30							378	251	256
31							---	---	---
TOTAL							7432	---	2199.8

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	406	292	320	361	77	75	220	70	42
2	425	324	372	457	129	159	206	70	39
3	441	425	511	558	288	443	186	70	35
4	493	668	930	514	242	336	174	70	33
5	525	528	1030	416	133	149	169	70	32
6	464	666	834	363	111	109	163	70	31
7	390	347	365	327	80	71	178	70	34
8	371	258	258	321	90	78	255	100	69
9	395	260	277	363	104	102	190	50	26
10	423	434	493	389	130	136	143	40	15
11	463	512	640	355	82	79	134	20	7.2
12	497	700	939	365	109	107	129	19	5.8
13	507	303	415	269	69	50	134	99	6.2
14	457	239	295	226	57	35	147	102	8.3
15	418	195	220	216	48	28	165	102	7.6
16	385	162	168	212	44	25	240	287	193
17	387	164	171	230	57	35	303	733	591
18	462	432	542	223	56	34	268	380	275
19	513	930	1420	197	39	21	221	235	140
20	620	1440	2400	203	43	24	431	2070	2860
21	583	846	1330	218	42	25	260	400	281
22	542	539	789	289	119	93	192	252	131
23	592	527	842	250	92	62	153	463	188
24	485	249	326	253	92	63	126	70	24
25	431	184	217	279	80	60	114	70	22
26	417	142	160	462	1250	1740	103	70	20
27	368	89	88	572	880	1360	102	70	20
28	390	104	110	446	295	355	97	50	13
29	397	102	109	325	168	147	95	50	13
30	381	78	80	256	97	67	96	50	13
31	346	69	64	229	74	46	---	---	---
TOTAL	13974	---	16715	10144	---	6114	5394	---	5175.1

15277800 WEST FORK EKLUTNA CREEK NEAR PALMER

LOCATION.--Lat 61°17'54", long 148°58'25", in SE¼SE¼ sec.18, T.14 N., R.3 E., Municipality of Anchorage, Hydrologic Unit 19050002, on right bank 2.5 mi upstream from confluence with East Fork, 3.2 mi upstream from Eklutna Lake and 21.2 mi south of Palmer.

DRAINAGE AREA.--25.4 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1960 to September 1962, June 1985 to current year.

GAGE.-- Water-stage recorder. Elevation of gage is 1,020 ft above National Geodetic Vertical Datum of 1929, from topographic map. June 1960 to September 1962, at site 0.2 mi downstream at different datum.

REMARKS.--Estimated dailygood except for period of no gage-height record, Oct. 14 to May 15, and period with ice effect, May 16-29, which are poor. Recording rain gage at station, daily values of precipitation available from WATSTORE. Stream flow augmented by glaciers, which cover 51 percent of the basin.

EXTREMES FOR PERIOD OF RECORD.-- Maximum discharge, 1,470 ft^3/s, Aug. 29, 1962, gage height, 3.84 ft, site and datum then in use; no flow at times during winter periods.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 700 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 20	1900	*960	*9.58	Aug. 27	1315	856	9.07
Aug. 3	2045	755	9.20				

No flow Feb. 15 to Apr. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	58	10	3.0	1.0	1.0	.00	.00	1.0	53	244	458	405
2	54	9.0	3.0	1.0	1.0	.00	.00	1.0	43	296	530	363
3	50	9.0	3.0	1.0	1.0	.00	.00	1.0	39	339	590	317
4	47	9.0	3.0	1.0	1.0	.00	.00	2.0	38	418	535	271
5	48	8.0	3.0	1.0	1.0	.00	.00	2.0	37	468	473	246
6	42	8.0	3.0	1.0	1.0	.00	.00	2.0	43	448	442	232
7	40	8.0	3.0	1.0	1.0	.00	.00	2.0	61	439	381	266
8	40	7.0	3.0	1.0	1.0	.00	.00	2.0	60	395	391	271
9	39	7.0	3.0	1.0	1.0	.00	.00	3.0	61	390	394	183
10	36	7.0	3.0	1.0	1.0	.00	.00	3.0	61	438	438	139
11	34	6.0	3.0	1.0	1.0	.00	.00	3.0	58	484	415	128
12	32	6.0	3.0	1.0	1.0	.00	.00	3.0	61	462	398	129
13	32	6.0	3.0	1.0	1.0	.00	.00	4.0	74	516	311	139
14	34	5.0	2.0	1.0	1.0	.00	.00	4.0	98	514	270	144
15	30	5.0	2.0	1.0	.00	.00	.00	5.0	128	540	262	163
16	27	5.0	2.0	1.0	.00	.00	1.0	5.2	170	487	261	212
17	26	5.0	2.0	1.0	.00	.00	1.0	5.5	216	438	275	266
18	24	5.0	2.0	1.0	.00	.00	1.0	6.5	270	581	284	279
19	23	5.0	2.0	1.0	.00	.00	1.0	7.0	253	623	260	260
20	22	5.0	2.0	1.0	.00	.00	1.0	8.0	202	775	278	373
21	20	5.0	2.0	1.0	.00	.00	1.0	9.0	174	737	294	275
22	19	4.0	2.0	1.0	.00	.00	1.0	10	170	663	387	203
23	18	4.0	2.0	1.0	.00	.00	1.0	12	153	679	361	161
24	16	4.0	2.0	1.0	.00	.00	1.0	14	131	569	423	135
25	15	4.0	2.0	1.0	.00	.00	1.0	16	117	497	464	121
26	14	4.0	2.0	1.0	.00	.00	1.0	18	133	487	615	110
27	13	4.0	2.0	1.0	.00	.00	1.0	22	155	461	735	97
28	12	4.0	2.0	1.0	.00	.00	1.0	27	195	471	647	85
29	12	4.0	2.0	1.0	---	.00	1.0	33	201	466	554	81
30	11	3.0	2.0	1.0	---	.00	1.0	41	224	443	511	80
31	10	---	2.0	1.0	---	.00	---	55	---	428	448	---
TOTAL	898	175.0	75.0	31.0	14.00	.00	15.00	327.2	3679	15196	13085	6134
MEAN	29.0	5.83	2.42	1.00	.50	.000	.50	10.6	123	490	422	204
MAX	58	10	3.0	1.0	1.0	.00	1.0	55	270	775	735	405
MIN	10	3.0	2.0	1.0	.00	.00	.00	1.0	37	244	260	80
CFSM	1.14	.23	.10	.04	.02	.000	.02	.42	4.84	19.3	16.6	8.03
IN.	1.32	.26	.11	.05	.02	.00	.02	.48	5.39	22.25	19.16	8.98
AC-FT	1780	347	149	61	28	.00	30	649	7300	30140	25950	12170

WTR YR 1986 TOTAL 39629.20 MEAN 109 MAX 775 MIN .00 CFSM 4.29 IN 58.04 AC-FT 78600

15277800 WEST FORK EKLUTNA CREEK NEAR PALMER--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1985 to current year.

PERIOD OF DAILY RECORD.--
SUSPENDED-SEDIMENT DISCHARGE: June 1985 to current year (seasonal).

INSTRUMENTATION.--Automatic pumping sampler since June 1985, set to collect samples three times daily.

REMARKS.--Suspended-sediment samples were collected with a depth-integrating sampler, June 6, 24, July 9, 23, 31 Aug. 14, 29, and Sept. 12, to adjust concentration values obtained with pumping sampler. Unpublished bedload and hourly air temperature data are available in the files at the Anchorage Subdistrict office.

EXTREMES FOR PERIOD OF DAILY RECORD.--
SEDIMENT CONCENTRATION: Maximum adjusted daily mean, 1,460 mg/l, Aug. 14, 1985; minimum adjusted daily mean, 56 mg/l, June 6, 1985.
SEDIMENT DISCHARGE: Maximum daily, 2,560 tons/day, July 22, 1986; minimum daily, 6.8 tons/day, June 3, 1985.

EXTREMES FOR CURRENT YEAR.--
SEDIMENT CONCENTRATION: Maximum adjusted daily mean for period June to September, 1,430 mg/L, July 22; minimum adjusted daily mean, 70 mg/L, Sept. 14.
SEDIMENT DISCHARGE: Maximum daily for period June to September, 2,560 tons/day, July 22; minimum daily, 11 tons/day, June 4, 5.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT								
24...	1400	28.0	16	-16.5	0.0	25	1.1	--
MAY								
16...	1600	9.30	5.2	14.0	0.5	61	0.86	--
JUN								
06...	1115	29.5	35	6.5	2.0	112	11	--
24...	1500	35.0	134	15.0	2.0	607	220	79
JUL								
09...	1300	41.5	374	--	--	594	600	87
23...	1245	40.0	669	--	--	803	1450	68
31...	1250	42.0	407	--	--	393	432	78
AUG								
14...	1415	39.0	256	--	2.0	282	195	82
29...	1045	41.0	515	12.0	--	714	993	74
SEP								
12...	1200	36.0	116	13.0	2.0	90	28	97

15277800 WEST FORK EKLUTNA CREEK NEAR PALMER--Continued

SEDIMENT DISCHARGE, SUSPENDED (TONS/DAY), JUNE TO SEPTEMBER 1986

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		APRIL			MAY			JUNE	
1							53	110	16
2							43	110	13
3							39	110	12
4							38	110	11
5							37	110	11
6							43	110	13
7							61	110	18
8							60	160	26
9							61	187	31
10							61	176	29
11							58	121	19
12							61	132	22
13							74	132	26
14							98	140	37
15							128	168	58
16							170	186	85
17							216	258	150
18							270	416	303
19							253	448	306
20							202	358	195
21							174	299	140
22							170	260	119
23							153	234	97
24							131	210	74
25							117	161	51
26							133	154	55
27							155	143	60
28							195	129	68
29							201	168	91
30							224	177	107
31							---	---	---
TOTAL							3679	---	2243

DAY	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)	MEAN DISCHARGE (CFS)	MEAN CONCEN-TRATION (MG/L)	SEDIMENT DISCHARGE (TONS/DAY)
		JULY			AUGUST			SEPTEMBER	
1	244	270	178	458	315	390	405	266	291
2	296	420	336	530	365	522	363	243	238
3	339	498	456	590	644	1030	317	196	168
4	418	573	647	535	597	862	271	144	105
5	468	609	770	473	543	693	246	135	90
6	448	672	813	442	515	615	232	112	70
7	439	640	759	381	458	471	266	104	75
8	395	616	657	391	470	496	271	108	79
9	390	592	623	394	473	503	183	100	49
10	438	500	591	438	513	607	139	100	38
11	484	542	708	415	492	551	128	90	31
12	462	530	661	398	476	512	129	80	28
13	516	578	805	311	396	333	139	77	29
14	514	580	805	270	308	225	144	70	27
15	540	592	863	262	266	188	163	77	34
16	487	574	755	261	275	194	212	84	48
17	438	533	630	275	276	205	266	100	72
18	581	650	1020	284	207	159	279	125	94
19	623	672	1130	260	189	133	260	100	70
20	775	998	2090	278	216	162	373	500	504
21	737	1110	2210	294	235	187	275	200	148
22	663	1430	2560	387	288	301	203	150	82
23	679	976	1790	361	350	341	161	100	43
24	569	924	1420	423	375	428	135	90	33
25	497	714	958	464	275	345	121	90	29
26	487	508	668	615	494	820	110	90	27
27	461	460	573	735	702	1390	97	80	21
28	471	441	561	647	735	1280	85	80	18
29	466	420	528	554	598	894	81	80	17
30	443	403	482	511	507	700	80	80	17
31	428	391	452	448	462	559	---	---	---
TOTAL	15196	---	27499	13085	---	16096	6134	---	2575

15278000 EKLUTNA LAKE NEAR PALMER

LOCATION.--Lat 61°24'39", long 149°07'20", in NE¼NE¼ sec.18, T.15 N., R.2 E., Municipality of Anchorage, Hydrologic Unit 19050002, on right shore, 0.7 mi upstream from lake outlet, 12 mi upstream from mouth of Eklutna Creek, and 14 mi south of Palmer.

DRAINAGE AREA.--119 mi².

PERIOD OF RECORD.--November 1946 to September 1962 (fragmentary after January 1955), June 1983 to current year. Fragmentary records for the period October 1962 to June 1983 available from Eklutna Hydroelectric Project.

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929 (levels by Alaska Power Administration). Prior to June 1983, non-recording gage at lake outlet at datum of 859.8 ft NGVD.

REMARKS.--Lake outlet consists of earth and rockfill dam with uncontrolled spillway crest at an elevation of 871 ft. Prior to 1965, control structure 1400 ft upstream with spillway crest at elevation of 867.5 ft which could be flash-boarded to elevation of 871 ft. Outflow was controlled by the flash boards and sluice gates. Storage begins at elevation of 859 ft. Reservoir is used for power generation. Satellite telemeter at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum elevation observed, 871.8 ft, Sept. 18, 1951; minimum observed, 814.2 ft, June 1, 1962.

EXTREMES FOR CURRENT YEAR.--Maximum elevation, 860.1 ft, Oct. 1; minimum, 815.6 ft, May 1.

GAGE HEIGHT (FEET ABOVE DATUM), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	860.10	856.20	852.10	846.90	840.30	833.30	825.60	815.70	818.80	826.30	845.80	855.90
2	860.00	856.00	852.00	846.80	840.10	833.00	825.30	815.70	818.90	826.70	846.40	856.10
3	859.90	855.80	851.80	846.60	839.90	832.80	825.00	815.80	819.10	827.20	847.10	856.20
4	859.90	855.60	851.70	846.60	839.60	832.50	824.80	815.80	819.30	827.70	847.80	856.50
5	859.90	855.40	851.50	846.50	839.40	832.20	824.40	815.80	819.40	828.40	848.40	856.80
6	859.80	855.30	851.30	846.40	839.10	832.20	824.10	815.90	819.60	829.10	848.90	856.90
7	859.60	855.10	851.10	846.30	838.80	831.50	823.80	816.00	819.80	829.70	849.40	857.10
8	859.50	854.80	850.90	846.10	838.70	831.30	823.40	816.00	820.00	830.20	849.70	857.30
9	859.50	854.60	850.80	845.80	838.50	831.10	823.10	816.10	820.20	830.70	850.10	857.40
10	859.50	854.40	850.70	---	838.20	830.90	822.70	816.10	820.40	831.20	850.60	857.40
11	859.40	854.20	850.50	---	838.00	830.60	822.40	816.20	820.60	831.80	851.10	857.30
12	859.40	854.10	850.30	---	837.70	829.40	822.00	816.20	820.90	832.40	851.60	857.30
13	859.30	853.90	850.10	---	837.50	830.10	821.60	816.30	821.10	833.10	851.90	---
14	859.10	853.80	849.80	---	837.30	830.00	821.30	816.40	821.30	833.90	852.20	857.30
15	859.10	853.80	849.60	---	837.00	829.70	821.00	816.40	821.60	834.50	852.30	857.30
16	858.90	853.60	849.60	844.50	836.80	829.50	820.60	816.60	822.00	835.10	852.50	857.40
17	858.80	853.50	849.30	844.30	836.60	829.30	820.30	816.70	822.50	835.70	852.60	857.50
18	858.60	853.40	849.10	844.00	836.30	829.00	819.90	816.80	823.10	836.30	852.80	857.70
19	858.50	853.30	849.00	843.80	836.10	828.80	819.60	816.90	823.50	837.00	852.90	857.80
20	858.30	853.20	848.80	843.50	835.80	828.60	819.20	816.90	823.80	838.00	853.00	858.00
21	858.20	853.20	848.60	843.20	835.60	828.30	818.90	817.00	824.10	838.90	853.10	858.30
22	858.00	853.10	848.50	842.90	835.30	828.10	818.60	817.10	824.30	839.80	853.30	858.40
23	857.90	853.00	848.40	842.60	835.00	827.80	818.20	817.20	824.50	840.60	853.50	858.50
24	857.60	852.90	848.20	842.30	834.60	827.60	817.90	817.30	824.60	841.40	853.70	858.40
25	857.50	852.80	848.10	842.00	834.30	827.30	817.50	817.50	824.80	842.00	853.80	858.40
26	857.30	852.80	847.90	841.80	834.10	827.10	817.20	817.60	824.80	842.70	854.00	858.30
27	857.10	852.60	847.80	841.50	833.80	826.90	816.90	817.70	825.10	843.40	854.50	858.20
28	856.90	852.50	847.60	841.30	833.50	826.60	816.50	817.90	825.40	843.90	855.00	858.20
29	856.80	852.40	847.40	841.00	---	826.40	816.20	818.10	825.70	844.40	855.30	858.10
30	856.60	852.20	847.20	840.80	---	826.10	815.90	818.30	826.00	844.90	855.60	858.00
31	856.40	---	847.10	840.50	---	825.90	---	818.50	---	845.40	855.80	---
MEAN	858.63	853.92	849.57	---	837.07	829.48	820.80	816.73	822.17	835.56	851.76	---
MAX	860.10	856.20	852.10	---	840.30	833.30	825.60	818.50	826.00	845.40	855.80	---
MIN	856.40	852.20	847.10	---	833.50	825.90	815.90	815.70	818.80	826.30	845.80	---

15281000 KNIK RIVER NEAR PALMER

LOCATION.--Lat 61°30'18", long 149°01'50", in NE¼SE¼ sec.2, T.16 N., R.2 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, near right bank on downstream side of bridge on Old Glenn Highway, 7 mi south of Palmer, 7 mi upstream from Alaska Railroad bridge, 9 mi downstream from Friday Creek, and about 17 mi downstream from Knik Glacier.

DRAINAGE AREA.--1,180 mi^2, approximately.

PERIOD OF RECORD.--October 1959 to current year.

REVISED RECORDS.--WDR AK-77-1: 1974-75 (M).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 27.51 ft above National Geodetic Vertical Datum of 1929, (recent surveys show a correction of -2.69 ft needed after earthquake of Mar. 27, 1964). Prior to June 27, 1960, nonrecording gage, and June 27, 1960 to Apr. 25, 1974, water-stage recorder at old bridge 100 ft upstream at present datum. Apr. 26, 1974 to Apr. 18, 1976, nonrecording gage at site 0.4 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 21 to Apr. 28, May 6 to June 23, and Sept. 15-18. Records good except for periods of no gage-height record, Oct. 29 to Apr. 23, May 6 to June 23, and Sept. 15-18, and periods with ice effect, Oct. 21-28 and Apr. 24-28, which are poor. Flood peaks due to outbreak of Lake George, 1948-62, 1964, 1965, published in WSP 1936. Streamflow augmented by glaciers, which cover 54 percent of the basin.

AVERAGE DISCHARGE.--27 years, 6,896 ft^3/s, 79.37 in/yr, 4,997,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 355,000 ft^3/s, July 26, 1961, gage height, 24.3 ft, site then in use, caused by release of stored water (Lake George) behind Knik Glacier; maximum gage height, 24.35 ft, site then in use, July 17, 1960; minimum daily discharge, about 260 ft^3/s, Mar. 1-31, 1962.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge since at least 1948, 359,000 ft^3/s, July 18, 1958, stage, 25.30 ft, site then in use.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 30,200 ft^3/s, July 21, gage height, 11.35 ft; minimum daily, about 600 ft^3/s, Feb. 26 to Mar. 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	7660	1000	800	1100	750	600	700	2020	8200	18800	19400	18900
2	6600	1000	800	1000	850	600	700	2140	7500	20000	19800	16600
3	5460	950	800	950	750	650	700	2150	6600	20400	21800	15200
4	4450	950	800	950	700	650	650	1910	7000	21900	23400	14000
5	3620	950	800	1000	700	700	650	2000	7500	23400	25400	13200
6	3090	950	800	1100	750	700	650	2230	8500	26000	25300	12700
7	2730	950	750	1100	850	700	650	2500	9000	24900	22900	12400
8	2710	900	750	1000	900	700	650	2700	8500	22700	21300	14100
9	3160	900	750	950	950	700	650	2800	7500	22800	22300	15000
10	2980	950	800	950	950	750	650	2900	7000	24000	23700	13600
11	2600	1000	950	900	850	750	650	3000	6500	24400	24000	11900
12	2340	1000	950	850	850	750	650	3000	9000	25500	23800	10800
13	2170	1000	900	850	800	750	650	3100	13000	24700	21700	10300
14	1980	950	900	850	800	750	700	3200	15000	22700	18600	10100
15	1810	950	850	850	800	750	700	3300	17000	22700	16900	10500
16	1730	950	900	850	750	750	700	3400	18000	21600	15800	11000
17	1670	900	950	800	750	750	700	3500	20000	20200	15300	12500
18	1560	900	950	750	750	750	700	3700	22000	21600	15300	13500
19	1540	900	1000	750	750	800	750	3900	21000	23000	14600	13200
20	1360	900	1100	750	700	800	800	4200	21000	26100	13800	14300
21	1300	900	1300	700	700	800	850	4700	20000	29000	13500	15900
22	1200	900	1600	700	700	750	850	5200	18000	28200	13900	14500
23	1200	900	1900	700	650	750	900	5500	17000	27900	14100	12300
24	1200	850	2000	700	650	750	950	5800	16400	28100	13400	9890
25	1100	850	1900	700	650	750	1000	6200	15500	25100	13300	7910
26	1100	900	1800	700	600	750	1200	6500	15200	23500	14300	6500
27	1100	900	1700	700	600	750	1400	7000	15300	22200	19100	5700
28	1100	900	1500	700	600	700	1500	7500	16000	21500	24700	5150
29	1000	850	1400	700	---	700	1600	7800	16200	21900	25900	4970
30	1000	850	1200	700	---	700	1750	8200	17200	21600	24500	5190
31	1000	---	1200	700	---	700	---	8800	---	21700	21600	---
TOTAL	73520	27750	34800	26000	21100	22450	25650	130850	406600	728100	603400	351810
MEAN	2372	925	1123	839	754	724	855	4221	13550	23490	19460	11730
MAX	7660	1000	2000	1100	950	800	1750	8800	22000	29000	25900	18900
MIN	1000	850	750	700	600	600	650	1910	6500	18800	13300	4970
CFSM	2.01	.78	.95	.71	.64	.61	.73	3.58	11.5	19.9	16.5	9.94
IN.	2.32	.87	1.10	.82	.67	.71	.81	4.13	12.82	22.95	19.02	11.09
AC-FT	145800	55040	69030	51570	41850	44530	50880	259500	806500	1444000	1197000	697800

CAL YR 1985 TOTAL 2077120 MEAN 5691 MAX 25400 MIN 645 CFSM 4.82 IN 65.48 AC-FT 4120000
WTR YR 1986 TOTAL 2452030 MEAN 6718 MAX 29000 MIN 600 CFSM 5.69 IN 77.30 AC-FT 4864000

15284000 MATANUSKA RIVER AT PALMER

LOCATION.--Lat 61°36'34", long 149°04'16", in SW¼NE¼sec. 34, T.18 N., R.2 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 100 ft downstream from bridge on Old Glenn Highway, and 1 mi east of Palmer.

DRAINAGE AREA.--2.070 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1949 to September 1973, May 1985 to September 1986 (discontinued). Annual maximum, water year 1974.

GAGE.--Water-stage recorder. Datum of gage is 170.92 ft above National Geodetic Vertical Datum of 1929 (Alaska Road Commission benchmark, prior to Mar. 27, 1964 earthquake). Prior to Nov. 2, 1950, non-recording gage at bridge 120 ft upstream at same datum. Nov. 2, 1950 to Apr.30, 1952, non-recording gage at bridge 100 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 16 to Apr. 28, Apr. 30 and May 2-4. Records fair except for period of no gage height-record, Oct. 29 to Apr. 28, and period with ice effect, Oct 16-28, which are poor.

AVERAGE DISCHARGE.--25 years (water years 1950-73, 1986), 3,826 ft³/s, 25.10 in/yr, 2,772,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 82,100 ft³/s, Aug. 10, 1971, gage height, 13.60 ft, from rating curve extended above 34,000 ft³/s on basis of velocity-area study, from breakout of natural reservoir on Granite Creek tributary; minimum daily, 234 ft³/s, Apr. 25, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 19,700 ft³/s, July 21, gage height, 9.63 ft; minimum daily, about 440 ft³/s, Apr. 7-9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2890	1200	950	850	600	500	460	1200	4320	9140	8120	5020
2	3090	1200	950	800	650	500	460	1300	3240	9470	7970	4820
3	3050	1200	950	800	600	480	480	1300	3050	9740	8500	4520
4	2890	1200	950	800	600	480	500	1200	2850	10900	8480	4370
5	2720	1100	950	750	600	480	480	1260	3710	11700	7980	4260
6	2680	1100	950	750	600	480	460	1370	4350	12500	7280	4160
7	2690	1100	950	700	650	480	440	1440	5340	12300	6910	4070
8	2790	1100	950	700	700	480	440	1220	4740	12200	6730	4070
9	2910	1100	950	700	750	480	440	1310	4220	11600	6580	4340
10	2780	1100	1000	700	700	500	460	1310	3490	11700	6680	4030
11	2600	1200	1000	700	650	500	460	1340	3190	12300	6670	3700
12	2470	1200	950	700	600	500	460	1380	3460	14000	6620	3430
13	2350	1100	950	700	600	500	480	1490	4900	16100	6270	3360
14	2110	1100	900	700	600	550	500	1530	6550	14300	5310	3370
15	1690	1100	900	700	600	550	550	1630	7380	11000	4880	3460
16	1600	1100	900	650	550	550	550	1630	9050	9870	4790	3770
17	1500	1100	900	650	550	550	550	1490	9820	9900	4700	4690
18	1400	1000	900	650	550	500	600	1450	12100	13500	4840	5070
19	1400	1000	900	650	550	550	600	1560	11300	14200	4520	4780
20	1300	1000	900	650	550	550	650	1700	11000	14500	4440	6340
21	1300	1000	950	650	550	550	650	2020	9380	16000	4580	7870
22	1300	1000	1000	650	550	550	700	2440	8510	11800	5240	6570
23	1200	1000	1100	650	550	600	700	2520	7620	12900	5180	5470
24	1200	1000	1100	650	550	600	750	2670	6810	12700	4950	4510
25	1200	1000	1000	600	550	600	750	3200	5860	10300	5020	3810
26	1200	950	950	600	520	550	800	3290	6020	9730	5210	3400
27	1200	950	950	600	500	500	800	3480	7040	8740	5640	3200
28	1200	950	900	600	500	500	850	3830	8050	8400	5680	3070
29	1200	950	850	600	---	480	896	4310	8300	8490	5590	2960
30	1200	950	850	600	---	480	1000	4120	8340	8500	5460	2900
31	1200	---	850	600	---	480	---	4770	---	8660	5150	---
TOTAL	60310	32050	29250	21100	16520	16050	17916	64760	193990	357140	185970	129390
MEAN	1945	1068	944	681	590	518	597	2089	6466	11520	5999	4313
MAX	3090	1200	1100	850	750	600	1000	4770	12100	16100	8500	7870
MIN	1200	950	850	600	500	480	440	1200	2850	8400	4440	2900
CFSM	.94	.52	.46	.33	.29	.25	.29	1.01	3.12	5.57	2.90	2.08
IN.	1.08	.58	.53	.38	.30	.29	.32	1.16	3.49	6.42	3.34	2.33
AC-FT	119600	63570	58020	41850	32770	31840	35540	128500	384800	708400	368900	256600

WTR YR 1986 TOTAL 1124446 MEAN 3081 MAX 16100 MIN 440 CFSM 1.49 IN 20.21 AC-FT 2230000

15284000 MATANUSKA RIVER AT PALMER--Continued

WATER-QUALITY RECORDS

Period of Record.--Water years 1948-54, 1957-68, and 1985 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE (DEG C) (00010)	TEMPER-ATURE, AIR (DEG C) (00020)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)
OCT									
10...	1200	110	2680	5.0	7.0	56	405	--	--
APR									
29...	1430	215	882	1.5	10.0	197	469	6	11
MAY									
06...	1530	231	1440	--	--	277	1080	14	23
SEP									
09...	1130	223	4400	5.0	--	356	4230	28	43

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
OCT								
10...	--	--	--	23	27	37	81	100
APR								
29...	--	26	--	56	75	91	100	--
MAY								
06...	--	44	--	62	71	89	100	--
SEP								
09...	60	70	75	78	81	89	98	100

15290000 LITTLE SUSITNA RIVER NEAR PALMER

LOCATION.--Lat 61°42'32", long 149°13'36", in NW¼ sec.26, T.19 N., R.1 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank 40 ft downstream from highway bridge on Wasilla-Fishhook Road, 1.5 mi north of road junction, 1.8 mi downstream from unnamed tributary, and 8 mi northwest of Palmer.

DRAINAGE AREA.--61.9 mi^2.

PERIOD OF RECORD.--July 1948 to current year. Low-flow records not equivalent prior to January 1962, because most measurements below 300 ft^3/s were made at site 3.4 mi downstream.

GAGE.--Water-stage recorder. Datum of gage is 918.6 ft (river-profile survey). Prior to Aug. 16, 1948, nonrecording gage and Aug. 17, 1948 to May 15, 1972, water-stage recorder on left bank. Prior to Oct. 1, 1974, at datum 2.00 ft higher.

REMARKS.--Estimated daily discharges: Oct. 25 to Apr. 27 and June 5-20. Records good except for Apr. 28 to May 22 and period of estimated discharge, June 5-20, which are fair, and for Oct. 1-24, the period with ice effect, Oct. 25 to Jan. 24, and the period of no gage-height record, Jan. 25 to Apr. 27, which are poor. Satellite telemeter at station.

AVERAGE DISCHARGE.--38 years, 211 ft^3/s, 46.29 in/yr, 152,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 7,840 ft^3/s, Aug. 10, 1971, gage height, 9.84 ft, in gage well, 12.30 ft, top of needle peak in gage well, about 13 ft from floodmarks, present datum, from rating curve extended above 4,600 ft^3/s on basis of slope-area measurement of peak flow; minimum daily, about 8 ft^3/s, Apr. 1-20, 1956 and Mar. 11, 12, 1957.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 1,200 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
July 20	1800	*2,050	*7.55	Sept.21	0730	1,450	6.60

Minimum daily discharge, about 14 ft^3/s, Apr. 7-11.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	409	78	47	34	33	23	16	58	319	353	399	255
2	378	77	46	34	32	22	16	65	266	336	344	257
3	358	75	45	34	32	21	15	53	258	314	312	255
4	333	73	44	34	31	21	15	42	233	341	287	244
5	303	71	42	34	31	20	15	46	320	330	271	229
6	294	70	41	34	30	19	15	56	370	304	249	216
7	289	68	41	34	30	19	14	55	430	267	227	213
8	305	66	40	34	30	18	14	51	370	247	255	220
9	318	64	40	34	31	18	14	46	320	248	233	218
10	273	62	39	34	31	18	14	43	280	247	232	204
11	256	60	39	34	31	17	14	47	250	257	228	193
12	243	59	39	34	31	17	15	69	360	257	261	183
13	230	57	38	34	30	18	15	87	470	446	290	178
14	210	56	38	34	30	18	15	67	555	346	265	170
15	207	55	37	34	30	18	16	60	645	279	246	167
16	206	53	36	33	29	18	17	66	690	257	234	208
17	191	52	35	33	29	19	18	82	680	251	223	374
18	181	52	35	33	29	19	19	80	540	266	242	401
19	152	52	35	33	28	19	19	100	485	253	252	339
20	151	51	35	33	28	19	20	117	420	806	260	985
21	173	50	35	33	28	19	21	113	355	684	225	1300
22	153	50	35	33	27	19	21	135	339	474	322	840
23	120	50	34	33	27	19	22	151	359	599	273	623
24	116	49	34	33	26	19	22	196	284	613	355	497
25	98	49	34	33	25	19	23	217	254	524	370	411
26	92	50	34	33	25	18	23	221	265	725	373	358
27	90	50	34	33	25	17	24	233	306	609	334	323
28	87	49	34	33	24	17	27	282	330	498	339	298
29	85	49	34	33	---	16	38	332	335	429	307	275
30	83	48	34	33	---	16	48	354	340	381	277	303
31	80	---	34	33	---	16	---	370	---	393	259	---
TOTAL	6464	1745	1168	1038	813	576	585	3894	11428	12334	8724	10737
MEAN	209	58.2	37.7	33.5	29.0	18.6	19.5	126	381	398	281	358
MAX	409	78	47	34	33	23	48	370	690	806	399	1300
MIN	80	48	34	33	24	16	14	42	233	247	223	167
CFSM	3.38	.94	.61	.54	.47	.30	.32	2.04	6.16	6.43	4.54	5.78
IN.	3.88	1.05	.70	.62	.49	.35	.35	2.34	6.87	7.41	5.24	6.45
AC-FT	12820	3460	2320	2060	1610	1140	1160	7720	22670	24460	17300	21300

CAL YR 1985 TOTAL 112196 MEAN 307 MAX 2060 MIN 16 CFSM 4.96 IN 67.43 AC-FT 222500
WTR YR 1986 TOTAL 59506 MEAN 163 MAX 1300 MIN 14 CFSM 2.63 IN 35.76 AC-FT 118000

15291000 SUSITNA RIVER NEAR DENALI

LOCATION.--Lat 63°06'14", long 147°30'57", in NE¼ sec.10, T.21 S., R.1 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on upstream right pier of bridge on Denali Highway, 0.2 mi downstream from Windy Creek, 3.3 mi upstream from Butte Creek, and 5.3 mi southwest of Denali.

DRAINAGE AREA.--950 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1957 to September 1966, July 1968 to July 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 2,440 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 2136 for history of changes prior to July 4, 1968. July 4, 1968 to Aug. 28, 1974, on left upstream wingwall, at present datum.

REMARKS.--Estimated daily discharges: Oct. 1 to June 4 and July 26-31. Records fair except for periods of no gage-height record, Oct. 1 to June 4 and July 26-31, which are poor. Streamflow augmented by glaciers, which cover 25 percent of the basin.

AVERAGE DISCHARGE.--26 years (water years 1958-66, 1969-85), 2,775 ft³/s, 39.67 in/yr, 2,010,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 38,200 ft³/s, Aug. 10, 1971, gage height, 13.32 ft, from rating curve extended above 19,000 ft³/s; maximum gage-height, 13.56 ft, May 11, 1970, backwater from ice; minimum daily discharge, about 34 ft³/s, Mar. 16-31, 1959.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 14 or 15, 1967 reached a stage of 12.7 ft, from floodmarks, discharge, 28,200 ft³/s, from rating curve extended above 19,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges during period, October 1985 to July 1986, greater than base discharge of 14,000 ft³/s:

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
July 7	0730	19,200	12.09	July 21	0200	21,900	12.28

Minimum daily discharge, about 190 ft³/s, Mar. 28 to Apr. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1985 TO JULY 1986 MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2100	760	470	350	260	220	190	420	5500	11100		
2	2000	750	470	340	260	220	190	450	6000	12200		
3	1900	730	460	340	250	220	190	480	5600	13600		
4	1800	710	450	340	250	210	190	550	4600	15000		
5	1700	700	450	330	250	210	190	600	4230	17300		
6	1700	680	450	330	250	210	190	700	4880	18100		
7	1600	660	450	330	250	210	190	750	5870	17300		
8	1700	650	440	330	250	210	190	800	6200	14900		
9	1800	640	430	330	250	210	190	900	6240	11700		
10	1600	630	420	320	240	210	190	950	5880	10400		
11	1400	620	420	320	240	200	190	1100	4540	9770		
12	1300	610	420	320	240	200	190	1200	3890	9910		
13	1300	600	410	310	240	200	190	1300	4700	11100		
14	1200	590	410	310	240	200	190	1400	6510	10300		
15	1200	580	400	310	240	200	200	1500	8080	10400		
16	1200	570	400	300	240	200	200	1700	9030	10600		
17	1100	560	400	300	240	195	200	2000	9040	11400		
18	1100	550	390	300	230	195	210	2300	9470	14500		
19	1000	540	390	290	230	195	210	2700	8310	14400		
20	1000	540	380	290	230	195	220	3200	8100	15000		
21	1000	530	380	290	230	195	230	4000	8260	20200		
22	960	520	380	280	230	195	240	5200	8960	19400		
23	930	520	370	280	230	195	250	6500	10500	17100		
24	910	510	370	280	220	195	270	6000	8990	15000		
25	880	500	360	280	220	195	280	5000	7190	12300		
26	870	500	360	270	220	195	300	5500	7130	11800		
27	850	490	360	270	220	195	320	6000	8090	11000		
28	830	480	360	270	220	190	340	5000	7600	10800		
29	820	480	360	270	---	190	360	4800	8690	10800		
30	800	470	350	270	---	190	390	4800	9710	11000		
31	780	---	350	260	---	190	---	5000	---	12000		
TOTAL	39330	17670	12510	9410	6670	6235	6880	82800	211790	410380		
MEAN	1269	589	404	304	238	201	229	2671	7060	13240		
MAX	2100	760	470	350	260	220	390	6500	10500	20200		
MIN	780	470	350	260	220	190	190	420	3890	9770		
CFSM	1.34	.62	.43	.32	.25	.21	.24	2.81	7.43	13.9		
IN.	1.54	.69	.49	.37	.26	.24	.27	3.24	8.29	16.07		
AC-FT	78010	35050	24810	18660	13230	12370	13650	164200	420100	814000		

CAL YR 1985 TOTAL 1093090 MEAN 2995 MAX 14300 MIN 280 CFSM 3.15 IN 42.80 AC-FT 2168000

15291000 SUSITNA RIVER NEAR DENALI--Continued

WATER-QUALTIY RECORDS

Period of Record.--Water years 1957-66, 1968-69, and 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)
JUN								
05...	1830	764	3970	332	3560	9	14	--
JUL								
25...	1600	940	11000	1110	33000	26	34	43

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
JUN							
05...	26	--	58	74	88	100	--
JUL							
25...	52	62	72	80	92	99	100

15291200 MACLAREN RIVER NEAR PAXSON

LOCATION.--Lat 63°07'10", long 146°31'45", Matanuska-Susitna Borough, Hydrologic Unit 19050002, near left bank on downstream side of bridge on Denali Highway, 1.5 mi downstream from Boulder Creek, and 34 mi west of Paxson.

DRAINAGE AREA.--280 mi^2, approximately.

PERIOD OF RECORD.--June 1958 to July 1986 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is 2,865.84 ft above National Geodetic Vertical Datum of 1929 (levels by Alaska Department of Public Works). See WSP 2136 for history of changes prior to Aug. 23, 1968. After June 6, 1986, a supplementary gage 500 ft downstream on left bank and at same datum was used.

REMARKS.--Estimated daily discharges: Oct. 1 to June 5, June 7 to July 9, July 16-25, and July 27-30. Records poor. Streamflow augmented by Maclaren Glacier, which covers 19 percent of the basin.

AVERAGE DISCHARGE.--27 years, (water years 1959-85) 981 ft^3/s, 47.58 in/yr, 710,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,260 ft^3/s, Aug. 11, 1971, gage height, 8.24 ft, from rating curve extended above 5,300 ft^3/s; maximum gage height, 9.10 ft, in May 1964, from floodmarks, backwater from ice; minimum daily discharge, about 40 ft^3/s, Mar. 1-25, 1965.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge during period October 1985 to July 1986, about 7,500 ft^3/s, July 21, but may have been higher during period of no gage-height record, July 5-6; minimum daily, about 95 ft^3/s, Apr. 15-16.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1985 TO JULY 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	650	200	110	100	100	110	110	140	2000	4200		
2	600	200	110	100	100	110	110	150	2200	4600		
3	550	190	100	100	100	110	110	160	1900	5000		
4	550	190	100	100	100	110	110	180	1700	6000		
5	550	180	100	100	100	110	110	200	1500	6400		
6	500	180	100	100	100	110	100	220	1500	6500		
7	500	170	100	100	100	110	100	250	1800	6000		
8	480	170	100	100	100	110	100	280	2200	5400		
9	460	160	100	100	100	110	100	310	2400	4700		
10	440	160	100	100	100	110	100	340	2000	4250		
11	420	150	100	100	100	110	100	370	1700	3860		
12	400	150	100	100	100	110	100	400	1800	3930		
13	400	150	100	100	100	110	100	450	1900	4090		
14	380	140	100	100	100	120	100	500	2200	3420		
15	380	140	100	100	100	120	95	600	2600	3290		
16	360	140	100	100	100	120	95	700	3200	3500		
17	360	130	100	100	100	120	100	800	3400	4300		
18	340	130	100	100	100	120	100	900	3600	5500		
19	320	130	100	100	100	120	100	1000	3400	5500		
20	320	130	100	100	100	120	100	1200	3200	6500		
21	300	120	100	100	100	120	100	1600	3200	7500		
22	300	120	100	100	100	120	100	2000	3600	7000		
23	280	120	100	100	100	120	100	2400	3800	6000		
24	280	120	100	100	100	120	110	2200	3000	5000		
25	260	120	100	100	100	120	110	1800	2800	4000		
26	260	120	100	100	100	120	110	2000	2800	3600		
27	240	110	100	100	100	120	120	2200	3000	3500		
28	240	110	100	100	100	110	120	1900	2800	3400		
29	220	110	100	100	---	110	120	1800	3400	3400		
30	220	110	100	100	---	110	130	1800	3800	3500		
31	220	---	100	100	---	110	---	1900	---	3600		
TOTAL	11780	4350	3120	3100	2800	3550	3160	30750	78400	147440		
MEAN	380	145	101	100	100	115	105	992	2613	4756		
MAX	650	200	110	100	100	120	130	2400	3800	7500		
MIN	220	110	100	100	100	110	95	140	1500	3290		
CFSM	1.36	.52	.36	.36	.36	.41	.38	3.54	9.33	17.0		
IN.	1.57	.58	.41	.41	.37	.47	.42	4.09	10.42	19.59		
AC-FT	23370	8630	6190	6150	5550	7040	6270	60990	155500	292400		

CAL YR 1985 TOTAL 393067 MEAN 1077 MAX 6160 MIN 100 CFSM 3.85 IN 52.22 AC-FT 779600

15291500 SUSITNA RIVER NEAR CANTWELL

LOCATION.--Lat 62°41'55", long 147°32'42", in SE¼SE¼ sec.10, T.30 N., R.10 E., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank at lower end of gorge, 8 mi east of Clarence Lake, 9.7 mi downstream from Oshetna River, and 65 mi southeast of Cantwell.

DRAINAGE AREA.--4,140 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1961 to September 1972, June 1980 to July 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 1,900 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 29, 1980, gage on opposite bank and at different datum.

REMARKS.--Estimated daily discharges: Oct. 1 to June 19 and July 31. Records good except periods of no gage-height record, Oct. 1 to June 19, and July 31, which are poor. Large diurnal fluctuations at times each year caused by glacier melt at the source. Satellite telemetry installed May 1983.

AVERAGE DISCHARGE.--16 years (water years 1962-72, 1981-85), 6,390 ft^3/s, 20.96 in/yr, 4,630,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 55,000 ft^3/s, Aug. 10, 1971, on basis of discharge recorded at stations 15291000 and 15292000; minimum daily discharge, about 400 ft^3/s, Mar. 16-31, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period, October 1985 to July 1986, 24,700 ft^3/s, July 21, gage height, 7.37 ft; minimum daily, about 650 ft^3/s, Apr. 6-15.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1985 TO JULY 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5200	1700	1100	760	690	660	660	1400	14000	17000		
2	4900	1700	1100	760	690	660	660	1600	14500	18200		
3	4600	1600	1000	750	690	660	660	1800	13000	19500		
4	4400	1600	1000	750	690	660	660	2000	11500	20400		
5	4200	1600	1000	750	690	660	660	2400	11000	21800		
6	4200	1600	990	750	680	660	650	2600	12500	22900		
7	4100	1500	980	750	680	660	650	2800	14000	23000		
8	4200	1500	970	750	680	660	650	3100	15500	22300		
9	4100	1500	960	740	680	660	650	3300	15500	20300		
10	3900	1500	950	740	680	660	650	3600	15000	17900		
11	3800	1400	930	730	670	660	650	3900	14500	17000		
12	3500	1400	920	730	670	660	650	4300	13500	16300		
13	3300	1400	910	730	670	660	650	4700	13000	19100		
14	3100	1400	900	730	670	660	650	5100	15000	21800		
15	3000	1400	890	730	670	660	650	5500	17500	18800		
16	2900	1300	880	730	670	660	660	6000	18500	17700		
17	2800	1300	870	730	670	660	660	6500	19500	16700		
18	2700	1300	860	720	670	660	660	7100	20500	18100		
19	2600	1300	850	720	670	660	680	7900	20000	19600		
20	2400	1300	840	720	670	660	680	8300	19000	19200		
21	2300	1200	830	720	670	660	700	10000	18000	22000		
22	2200	1200	820	720	670	660	720	12000	16900	23100		
23	2200	1200	810	720	670	660	750	14000	16600	21600		
24	2100	1200	810	720	670	660	780	13000	18700	21500		
25	2000	1200	800	720	670	660	820	13000	15900	19800		
26	2000	1200	790	710	660	660	880	13000	13600	18300		
27	1900	1200	780	710	660	660	950	13000	13300	18800		
28	1800	1100	780	710	660	660	1000	13000	14300	14600		
29	1800	1100	770	710	---	660	1100	13000	14500	13000		
30	1800	1100	770	700	---	660	1200	13000	15500	12400		
31	1700	---	770	700	---	660	---	13500	---	13000		
TOTAL	95700	41000	27630	22610	18880	20460	22040	224600	464800	585700		
MEAN	3087	1367	891	729	674	660	735	7245	15490	18890		
MAX	5200	1700	1100	760	690	660	1200	14000	20500	23100		
MIN	1700	1100	770	700	660	660	650	1400	11000	12400		
CFSM	.75	.33	.22	.18	.16	.16	.18	1.75	3.74	4.56		
IN.	.86	.37	.25	.20	.17	.18	.20	2.02	4.18	5.26		
AC-FT	189800	81320	54800	44850	37450	40580	43720	445500	921900	1162000		

CAL YR 1985 TOTAL 2159430 MEAN 5916 MAX 27100 MIN 770 CFSM 1.43 IN 19.40 AC-FT 4283000

15291500 SUSITNA RIVER NEAR CANTWELL--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1962-72 and 1980 to July 1986 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May to October 1980, June 1982 to July 1986 (seasonal).

INSTRUMENTATION.--Digital-water-temperature recorder May 1980 to August 1983. Electronic-water-temperature recorder since June 1984, set for one hour-recording interval.

REMARKS.--No record Oct. 1-19 when probe was out of water, Oct. 20 to June 19 when recorder was removed for winter. Records represent water temperature at the sensor within 0.5°C. No temperature cross sections were run during the 1986 water year.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Minimum, 0.0°C, on many days during winter period.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 14.0°C, July 4, 1986.

EXTREMES FOR CURRENT PERIOD.--June to July 1986:
WATER TEMPERATURE: Maximum for period, 14.0 °C, July 4.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)
JUN									
20...	1400	409	19200	16.5	9.5	558	28900	11	16
JUL									
30...	1430	399	11700	11.5	10.0	450	14200	23	32

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
JUN								
20...	20	26	33	46	58	78	97	100
JUL								
30...	42	50	57	68	78	89	98	100

15291500 SUSITNA RIVER NEAR CANTWELL--Continued

TEMPERATURE, WATER (DEG. C), JUNE TO JULY 1986

DAY	MAX	MIN	MAX	MIN
	JUNE		JULY	
1	---	---	12.5	12.0
2	---	---	13.0	11.5
3	---	---	13.5	12.0
4	---	---	14.0	12.0
5	---	---	13.5	11.5
6	---	---	12.5	11.5
7	---	---	12.0	10.0
8	---	---	10.5	9.0
9	---	---	10.0	9.5
10	---	---	10.5	9.0
11	---	---	11.0	9.0
12	---	---	10.5	9.5
13	---	---	10.0	8.5
14	---	---	10.0	8.0
15	---	---	12.0	9.5
16	---	---	12.0	10.5
17	---	---	13.0	10.5
18	---	---	12.5	11.5
19	---	---	11.5	10.0
20	9.5	---	10.0	8.0
21	9.0	8.0	8.0	7.5
22	8.5	7.5	9.0	8.0
23	8.5	7.5	9.0	7.5
24	8.0	7.0	7.5	6.5
25	9.0	7.5	7.0	6.5
26	11.0	8.0	8.0	6.0
27	12.5	10.5	9.5	7.0
28	13.5	11.5	10.5	9.0
29	13.5	12.0	11.0	9.5
30	13.5	12.0	---	---
31	---	---	---	---
MONTH	13.5		14.0	6.0

15292000 SUSITNA RIVER AT GOLD CREEK

LOCATION.--Lat 62°46'04", long 149°41'28", in NW¼ sec.20, T.31 N., R.2 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, near left bank under Alaska Railroad bridge, 0.1 mi downstream from Gold Creek, 0.9 mi north of Gold Creek railroad station, and 2.0 mi downstream from Indian River.

DRAINAGE AREA.--6,160 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--August 1949 to current year.

GAGE.--Water-stage recorder. Datum of gage is 676.50 ft above National Geodetic Vertical Datum of 1929. Prior to June 6, 1957, nonrecording gage at same site and datum. June 7, 1957 to June 2, 1964, water-stage recorder at site 0.3 mi upstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 19 to May 21. Records good except for estimated daily discharges, which are poor. Satellite telemetry at station.

AVERAGE DISCHARGE.--37 years, 9,692 ft³/s, 21.37 in/yr, 7,022,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 90,700 ft³/s, June 7, 1964, gage height, 16.58 ft; maximum gage height observed, 24.48 ft, May 10, 1954, ice jam; minimum daily discharge, about 600 ft³/s, Feb. 16-20, 1950.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 29,100 ft³/s, June 18, gage height, 11.03 ft; minimum daily, about 1,300 ft³/s, Mar. 30 to Apr. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	11700	3500	2100	1700	1600	1400	1300	2800	20100	19100	17600	15100
2	11100	3400	2100	1700	1600	1400	1300	3000	18300	21000	16500	15000
3	10900	3300	2100	1700	1600	1400	1300	3300	17500	21600	15200	15500
4	10500	3200	2100	1700	1600	1400	1300	3700	15500	22500	16300	15100
5	9770	3200	2100	1700	1600	1400	1300	4100	15100	23000	17800	13600
6	9010	3100	2000	1700	1600	1400	1300	4600	18000	24300	18900	12600
7	8800	3000	2000	1700	1600	1400	1300	5100	20700	24300	17800	12000
8	9080	2900	2000	1700	1600	1400	1300	5000	21000	24100	16200	12000
9	9200	2900	2000	1700	1600	1400	1300	5500	20000	22500	16200	12700
10	8880	2800	2000	1700	1600	1400	1300	6000	19500	20300	16900	12800
11	8600	2800	2000	1700	1600	1400	1300	6600	19100	18800	17300	11400
12	8080	2700	2000	1700	1600	1400	1300	7200	17000	18000	19600	10400
13	7620	2700	2000	1700	1600	1400	1300	8000	16400	23100	23100	9770
14	7200	2600	1900	1700	1600	1400	1300	8800	19700	27100	24700	9400
15	6930	2600	1900	1700	1600	1400	1350	9800	23600	23500	20900	9240
16	6630	2600	1900	1700	1600	1400	1400	11000	25500	20400	17500	9240
17	6630	2500	1900	1700	1600	1400	1400	12000	26000	19300	15400	9990
18	6540	2500	1900	1700	1600	1400	1450	13500	27700	19100	14400	12500
19	5800	2500	1900	1600	1600	1400	1500	15000	27300	21200	15100	14100
20	5500	2400	1900	1600	1600	1400	1550	16500	24500	21500	15500	17700
21	5100	2400	1900	1600	1500	1400	1600	18500	22400	24300	15200	20900
22	4900	2400	1900	1600	1500	1400	1650	20100	21000	26800	16700	20700
23	4700	2300	1800	1600	1500	1400	1750	22500	20000	25100	16800	17400
24	4500	2300	1800	1600	1500	1400	1800	21000	20400	25400	16200	14200
25	4300	2300	1800	1600	1500	1400	1900	20600	20000	25200	16100	11800
26	4200	2300	1800	1600	1400	1400	2000	20200	16500	23600	15900	10600
27	4100	2300	1800	1600	1400	1400	2100	20400	15700	23400	15600	9930
28	3900	2300	1800	1600	1400	1400	2300	20300	16700	20100	18000	9760
29	3800	2200	1800	1600	---	1400	2400	19700	17100	17100	18100	9680
30	3700	2200	1800	1600	---	1300	2600	19700	17900	15900	17200	10700
31	3600	---	1800	1600	---	1300	---	20100	---	16300	16100	---
TOTAL	215270	80200	59800	51400	43700	43200	46950	374600	600200	677900	534800	385810
MEAN	6944	2673	1929	1658	1561	1394	1565	12080	20010	21870	17250	12860
MAX	11700	3500	2100	1700	1600	1400	2600	22500	27700	27100	24700	20900
MIN	3600	2200	1800	1600	1400	1300	1300	2800	15100	15900	14400	9240
CFSM	1.13	.43	.31	.27	.25	.23	.25	1.96	3.25	3.55	2.80	2.09
IN.	1.30	.48	.36	.31	.26	.26	.28	2.26	3.62	4.09	3.23	2.33
AC-FT	427000	159100	118600	102000	86680	85690	93130	743000	1190000	1345000	1061000	765300

CAL YR 1985 TOTAL 3618880 MEAN 9915 MAX 39700 MIN 1600 CFSM 1.61 IN 21.85 AC-FT 7178000
WTR YR 1986 TOTAL 3113830 MEAN 8531 MAX 27700 MIN 1300 CFSM 1.39 IN 18.80 AC-FT 6176000

15292000 SUSITNA RIVER AT GOLD CREEK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1949-58, 1962, 1967-68, 1974 to September 1986 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: July 1974 to September 1980 (seasonal), August 1982 to September 1985 (seasonal).

INSTRUMENTATION.--Digital water-temperature recorder July 1974 to Sept. 1980, located on left bank under bridge. From August 1982 to September 1985, digital water-temperature recorder located 300 ft downstream on right bank.

REMARKS.--No daily record published for 1986 due to instrument malfunctions. Temperature records for all or part of several days are available in the Anchorage Subdistrict office files. Temperature at the sensor was compared with the average for the river by temperature cross sections on Mar. 24, May 22, June 25, July 30, Aug. 25, and Sept. 23. A maximum variation of 0.3°C was found within the cross sections.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Minimum; 0.0°C many days during the winter period.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 15.0°C, July 3, 4, 1979, June 28, 29, 1983, and July 18, 19, 1985.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
MAR								
24...	1310	10.0	269	8.00	0.0	734	13.1	93
24...	1320	100	250	8.00	0.0	734	13.5	96
24...	1330	130	274	7.90	0.0	734	14.1	100
24...	1340	230	268	8.00	0.0	734	13.4	95
24...	1350	270	266	7.80	0.0	734	13.4	95
MAY								
22...	1730	125	--	8.00	3.0	744	13.0	100
22...	1731	180	--	8.00	2.5	744	13.0	97
22...	1732	230	--	7.90	2.5	744	13.1	98
22...	1733	280	--	7.90	2.5	744	13.0	97
22...	1734	340	--	7.80	2.5	744	13.0	--
JUN								
25...	1625	130	126	8.10	9.0	753	11.0	96
25...	1626	180	125	8.10	9.0	753	11.0	96
25...	1627	230	122	8.10	9.0	753	11.0	96
25...	1628	280	121	8.10	9.0	753	11.0	96
25...	1629	350	118	8.10	9.0	753	10.8	94
JUL								
30...	0955	130	137	8.20	11.5	751	10.1	94
30...	0956	180	140	8.10	11.5	751	10.0	94
30...	0957	230	139	8.10	11.5	751	10.2	95
30...	0958	280	135	8.10	11.5	751	10.1	94
30...	0959	350	132	8.10	11.5	751	10.1	94
AUG								
25...	1555	130	116	7.80	7.0	745	11.1	94
25...	1556	180	115	7.80	7.0	745	11.2	94
25...	1557	230	114	7.80	7.0	745	11.3	95
25...	1558	280	112	7.90	7.0	745	11.3	95
25...	1559	350	101	7.90	7.0	745	11.2	94
SEP								
23...	1555	130	122	8.30	5.0	744	11.2	89
23...	1556	180	121	8.30	4.5	744	12.0	96
23...	1557	230	119	8.50	4.5	744	11.9	95
23...	1558	280	116	8.60	4.5	744	11.7	93
23...	1559	350	107	8.60	4.5	744	11.5	92

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TUR-BID-ITY (NTU) (00076)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
MAR										
24...	1400	308	1450	0.90	100	27	33	4.6	17	2.6
MAY										
22...	1735	--	18900	32	37	9	12	1.7	3.4	1.6
JUN										
25...	1630	--	19500	110	51	17	17	2.1	3.9	1.7
JUL										
30...	1000	--	16000	140	54	4	18	2.2	4.1	2.2
AUG										
25...	1600	--	16100	24	46	10	15	2.1	4.1	1.4
SEP										
23...	1600	--	16600	10	49	8	16	2.2	4.0	1.6

15292000 SUSITNA RIVER AT GOLD CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)
MAR 24...	74	74	90	0	14	33	<0.10	12	168
MAY 22...	30	28	34	0	9.8	5.1	<0.10	4.7	77
JUN 25...	35	34	41	0	14	5.7	<0.10	5.6	83
JUL 30...	51	50	61	0	15	5.3	<0.10	5.8	110
AUG 25...	37	36	44	0	11	5.2	<0.10	7.0	70
SEP 23...	--	--	--	--	19	5.0	<0.10	7.2	95

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, NH4 + ORG. SUSP. TOTAL (MG/L AS N) (00624)
MAR 24...	160	--	0.200	0.160	0.070	0.080	0.73	0.80	0.30
MAY 22...	55	<0.010	--	<0.100	0.050	0.040	0.55	0.60	--
JUN 25...	70	--	<0.100	<0.100	0.040	0.020	0.26	0.30	--
JUL 30...	83	--	<0.100	<0.100	0.050	<0.010	0.25	0.30	--
AUG 25...	68	--	<0.100	<0.100	0.030	0.010	--	<0.20	--
SEP 23...	80	<0.010	--	0.100	0.070	0.060	0.13	0.20	--

DATE	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN DISSOLVED (MG/L AS N) (00602)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)
MAR 24...	0.50	1.0	0.66	0.020	0.020	0.010	0.010	--	0.2
MAY 22...	--	--	--	0.220	0.010	0.010	<0.010	--	--
JUN 25...	0.20	--	--	0.430	0.010	0.030	<0.010	3.1	0.5
JUL 30...	<0.20	--	--	0.090	0.020	0.040	<0.010	2.1	0.5
AUG 25...	<0.20	--	--	0.050	<0.010	<0.010	<0.010	3.0	0.4
SEP 23...	--	--	--	<0.010	<0.010	0.050	0.020	--	--

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC SUSPENDED TOTAL (UG/L AS AS) (01001)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)	COBALT, DISSOLVED (UG/L AS CO) (01035)
MAR 24...	1400	2	0	2	<100	59	1	<1	<10	<10	<1	<1
JUN 25...	1630	5	--	1	200	35	13	3	20	<10	6	<1
JUL 30...	1000	5	--	1	<100	44	<1	<1	<10	<10	<1	<1
AUG 25...	1600	2	--	<1	<100	25	<1	1	<10	<10	1	<1

15292000 SUSITNA RIVER AT GOLD CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	COPPER, SUS-PENDED RECOV-ERABLE (UG/L AS CU) (01041)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE) (01044)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	LEAD, SUS-PENDED RECOV-ERABLE (UG/L AS PB) (01050)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN) (01054)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)
MAR 24...	14	9	5	130	120	9	5	4	1	10	8	2
JUN 25...	33	--	3	12000	--	170	13	--	<5	200	--	6
JUL 30...	8	--	3	430	--	170	<5	--	<5	10	--	6
AUG 25...	10	--	5	2400	--	54	<5	--	<5	40	--	2

DATE	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	NICKEL, SUS-PENDED RECOV-ERABLE (UG/L AS NI) (01066)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	ZINC, SUS-PENDED RECOV-ERABLE (UG/L AS ZN) (01091)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
MAR 24...	0.10	<0.1	2	0	3	<1	<1	<1	<1	50	10	40
JUN 25...	<0.10	<0.1	10	--	1	<1	<1	<1	<1	40	--	7
JUL 30...	0.10	0.2	<1	--	<1	<1	<1	<1	<1	<10	--	6
AUG 25...	0.50	0.8	5	--	3	<1	<1	<1	<1	20	--	11

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)
MAR 24...	1400	1450	4	16	--	--	--
MAY 22...	1735	18900	551	28100	7	11	17
JUN 25...	1630	19500	353	18600	18	24	30
JUL 30...	1000	16000	355	15300	25	33	42
AUG 25...	1600	16100	96	4170	--	--	--
SEP 23...	1600	16600	268	12000	24	31	38

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
MAR 24...	--	--	--	--	--	--	--
MAY 22...	24	34	48	60	83	99	100
JUN 25...	39	48	61	70	86	100	--
JUL 30...	50	58	68	76	88	99	100
AUG 25...	--	--	43	50	72	99	100
SEP 23...	44	51	59	66	82	98	100

15292400 CHULITNA RIVER NEAR TALKEETNA

LOCATION.--Lat 62°33'31", long 150°14'02", in SE¼ sec.32, T.29 N., R.5 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank, 0.5 mi downstream from Parks Highway bridge, 4.5 mi downstream from Troublesome Creek, 18 mi upstream from mouth, and 16 mi northwest of Talkeetna.

DRAINAGE AREA.--2,570 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1958 to September 1972 and annual maximum, water years 1973-77, 1979. May 1980 to July 1986 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 500 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 30, 1964, at site 3 mi downstream at different datum. Oct. 1, 1972 to Apr. 30, 1980, crest-stage gage at site 150 ft upstream at same datum. Streamflow augmented by glaciers, which cover 27 percent of the basin.

REMARKS.--Estimated daily discharges: Oct. 4 to May 28, June 19 to July 20, and July 23-31. Records poor except for Oct. 1-3, and May 29 to June 18, which are fair.

AVERAGE DISCHARGE.--19 years (water years 1959-72, 1981-85), 8,762 ft^3/s, 46.30 in/yr, 6,348,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 75,900 ft^3/s, July 20, 1967, gage height, 22.48 ft; minimum daily, about 650 ft^3/s, Apr. 1-15, 1963.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period October to July, 36,300 ft^3/s, July 14, gage height, 12.54 ft, from floodmarks; minimum daily discharge, about 940 ft^3/s, Mar. 18 to Apr. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1985 TO JULY 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	12400	2400	1600	1400	1200	1000	940	1100	12400	16000		
2	11200	2300	1600	1400	1200	1000	940	1100	12000	17000		
3	10100	2300	1600	1400	1200	1000	940	1200	11300	18000		
4	10200	2200	1600	1400	1200	1000	940	1200	10500	19000		
5	9700	2200	1600	1400	1200	1000	940	1300	10600	20000		
6	9100	2200	1500	1300	1200	1000	940	1300	11500	20000		
7	9200	2100	1500	1300	1200	990	940	1400	12700	19000		
8	9800	2100	1500	1300	1200	980	940	1500	13500	18000		
9	10300	2000	1500	1300	1200	970	940	1600	14000	19000		
10	9200	2000	1500	1300	1200	970	940	1700	13800	20000		
11	8400	2000	1500	1300	1200	960	940	1800	12700	19000		
12	7700	1900	1500	1300	1100	950	940	2000	11900	18000		
13	7200	1900	1500	1300	1100	950	940	2200	12800	30000		
14	6800	1900	1500	1300	1100	950	940	2400	14900	34500		
15	6300	1900	1500	1300	1100	950	940	2600	17500	25000		
16	6400	1800	1500	1300	1100	950	940	2900	19800	22000		
17	5900	1800	1500	1300	1100	950	940	3300	21200	20000		
18	5200	1800	1500	1300	1100	940	950	3600	23300	20000		
19	4600	1800	1500	1300	1100	940	950	4200	22000	21000		
20	4200	1800	1500	1300	1100	940	960	4700	20000	24000		
21	3800	1700	1400	1300	1100	940	960	5500	18000	32200		
22	3600	1700	1400	1300	1100	940	960	6500	16000	31400		
23	3500	1700	1400	1300	1100	940	970	8000	15000	30000		
24	3300	1700	1400	1300	1100	940	970	9000	14000	30000		
25	3100	1700	1400	1300	1100	940	980	10000	13000	29000		
26	2900	1700	1400	1300	1100	940	990	11000	13000	27000		
27	2800	1600	1400	1300	1000	940	1000	11200	12000	25000		
28	2700	1600	1400	1300	1000	940	1000	10300	13000	23000		
29	2600	1600	1400	1300	---	940	1000	10500	14000	21000		
30	2500	1600	1400	1300	---	940	1000	10700	15000	19000		
31	2500	---	1400	1300	---	940	---	11600	---	21000		
TOTAL	197200	57000	45900	40800	31700	29730	28670	147400	441400	708100		
MEAN	6361	1900	1481	1316	1132	959	956	4755	14710	22840		
MAX	12400	2400	1600	1400	1200	1000	1000	11600	23300	34500		
MIN	2500	1600	1400	1300	1000	940	940	1100	10500	16000		
CFSM	2.48	.74	.58	.51	.44	.37	.37	1.85	5.72	8.89		
IN.	2.85	.83	.66	.59	.46	.43	.41	2.13	6.39	10.25		
AC-FT	391100	113100	91040	80930	62880	58970	56870	292400	875500	1405000		

CAL YR 1985 TOTAL 3092720 MEAN 8473 MAX 39200 MIN 1100 CFSM 3.30 IN 44.77 AC-FT 6134000

15292400 CHULITNA RIVER NEAR TALKEETNA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1958-59, 1967-72, and 1980 to July 1986 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 1982 to July 1986 (seasonal).

INSTRUMENTATION.--Digital temperature recorder since May 1982, set for one-hour recording intervals.

REMARKS.--Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross section on May 29 and July 22. A maximum variation of 0.8°C was found within the cross section. A maximum variation observed between mean stream temperature and temperature at the probe was 0.7°C.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Minimum, 0.0°C, many days during winter period.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 11.5°C, June 13-15, and 30, 1986.

EXTREMES FOR CURRENT PERIOD.--
WATER TEMPERATURE: Maximum recorded, 11.5°C, June 13-15, and 30.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)
MAR								
18...	1200	202	940	23	58	--	--	--
MAY								
29...	1515	259	10500	594	16800	24	34	41
JUL								
22...	1400	315	35500	2730	262000	26	38	50

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	SED. SUSP. SIEVE DIAM. % FINER THAN 2.00 MM (70336)
MAR								
18...	--	--	--	--	--	--	--	--
MAY								
29...	49	56	62	68	78	86	88	99
JUL								
22...	64	74	84	90	96	100	--	--

15292400 CHULITNA RIVER NEAR TALKEETNA--Continued

TEMPERATURE, WATER (DEG. C), OCTOBER 1985 TO JULY 1986

DAY	MAX	MIN	DAY	MAX	MIN
	OCTOBER			OCTOBER	
1	4.5	3.5	13	2.5	.5
2	3.5	2.5	14	2.5	.0
3	4.5	3.0	15	.5	.0
4	3.5	1.0			
5	2.5	.5	16	1.5	.0
			17	.5	.0
6	2.5	1.0	18	.5	.0
7	2.5	1.5	19	.0	.0
8	2.5	2.0	20	.0	.0
9	3.5	2.5			
10	2.5	1.0	21	.0	.0
			22	.0	.0
11	2.5	1.0	23	.0	.0
12	1.5	.0			

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	7.0	5.5	11.0	7.0				
2			---	---	7.0	4.5	9.5	5.0				
3			---	---	6.0	4.5	9.0	5.0				
4			---	---	7.0	4.0	7.5	5.0				
5			---	---	8.0	5.0	7.5	4.5				
6			---	---	10.0	5.5	7.5	4.0				
7			---	---	8.0	5.5	6.5	4.0				
8			---	---	8.0	6.0	7.5	3.0				
9			---	---	7.0	5.0	7.5	3.5				
10			---	---	6.5	5.0	7.5	4.5				
11			---	---	9.0	5.0	6.0	3.5				
12			---	---	10.5	5.0	6.5	3.5				
13			---	---	11.5	6.5	5.5	3.5				
14			---	---	11.5	7.0	8.0	3.5				
15			---	---	11.5	7.5	7.0	5.5				
16			---	---	10.5	6.5	7.5	4.0				
17			---	---	10.5	7.0	9.0	4.5				
18			---	---	8.5	5.5	8.0	5.0				
19			---	---	9.5	4.5	6.0	4.0				
20			---	---	8.5	5.5	6.0	4.0				
21			---	---	7.5	4.5	---	4.0				
22			---	---	8.5	5.5	---	---				
23			---	---	9.0	5.5	---	---				
24			---	---	8.0	5.0	---	---				
25			---	---	8.0	5.0	---	---				
26			---	---	10.0	5.5	---	---				
27			---	---	11.0	6.0	---	---				
28			---	---	11.0	7.0	---	---				
29			9.5	---	10.0	7.0	---	---				
30			9.0	6.5	11.5	7.0	---	---				
31			8.5	5.5	---	---	---	---				
MONTH					11.5	4.0						

15292700 TALKEETNA RIVER NEAR TALKEETNA
(Hydrologic benchmark station)

LOCATION.--Lat 62°20'49", long 150°01'01", in NE¼ sec.16, T.26 N., R.4 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 1.7 mi downstream from Chunilna Creek, 3.5 mi northeast of Talkeetna, and about 5 mi upstream from mouth.

DRAINAGE AREA.--2,006 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1964 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 400 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 21 to May 22 and June 10-25. Records good except for periods of no gage-height record, Oct. 30 to May 22 and June 10-25, and period of ice effect, Oct. 21-29, which are poor.

AVERAGE DISCHARGE.--22 years, 4,013 ft³/s, 27.17 in/yr, 2,907,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 67,400 ft³/s, Aug. 10, 1971, gage height, 16.35 ft; minimum daily, about 260 ft³/s, Feb. 27 to Mar. 20, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 20,600 ft³/s, July 21, gage height, 9.46 ft; minimum daily, about 380 ft³/s, Apr. 11-22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	6750	1250	840	720	640	450	390	500	6960	6750	9380	6800
2	6130	1250	840	720	640	440	390	530	4900	7540	8980	6950
3	5920	1200	840	700	640	430	390	560	4020	7100	8450	6750
4	5370	1200	820	700	640	430	390	600	3700	8200	9450	6240
5	4870	1150	620	700	640	420	390	630	4730	8270	9560	5690
6	4690	1150	820	700	640	420	390	670	6230	8400	8510	5340
7	4690	1100	820	700	640	410	390	710	7630	7740	7680	5090
8	4970	1100	820	700	640	410	390	760	7940	7460	7430	5570
9	5340	1050	820	700	640	400	390	820	7050	7880	7730	6350
10	4660	1050	820	700	640	400	390	880	6000	8360	7550	5420
11	4270	1050	800	680	640	400	380	970	5200	8120	7970	4970
12	3930	1000	800	680	640	390	380	1050	4600	7820	9240	4720
13	3740	1000	800	680	640	390	380	1150	4300	11800	9630	4510
14	3430	980	800	680	640	390	380	1300	5800	12600	8510	4330
15	3220	980	800	680	630	390	380	1400	7000	9910	7890	4270
16	3320	960	780	680	620	390	380	1550	8000	8460	7110	4580
17	3090	960	780	680	610	390	380	1750	9400	7740	6500	6340
18	2940	940	780	680	590	390	380	1900	11000	8230	6380	8040
19	2400	940	780	680	580	390	380	2200	9200	8300	6970	7440
20	2090	920	780	680	560	390	380	2400	7300	9980	6570	13000
21	1950	920	760	660	550	390	380	2700	6700	16500	6180	17000
22	1800	920	760	660	540	390	380	3100	6000	11800	7620	11700
23	1700	900	740	660	520	350	390	3590	5400	11000	7700	10100
24	1650	900	740	660	500	390	400	4280	4900	10600	7820	8170
25	1550	880	740	660	490	390	400	5420	4700	9330	8460	6990
26	1500	880	740	660	470	390	410	5600	4510	11000	8780	6280
27	1450	860	740	660	460	390	430	5970	5120	9910	8370	6050
28	1400	860	740	660	450	390	440	5460	5700	8650	9140	5840
29	1350	860	720	660	---	390	460	6190	5920	7950	8410	5530
30	1350	840	720	660	---	390	480	6570	6360	7700	7710	6610
31	1300	---	720	660	---	390	---	7480	---	8530	7250	---
TOTAL	102820	30050	24280	21100	16530	12410	11870	78690	186270	283630	248990	206670
MEAN	3317	1002	783	681	590	400	396	2538	6209	9149	8032	6889
MAX	6750	1250	840	720	640	450	480	7480	11000	16500	9690	17000
MIN	1300	840	720	660	450	390	380	500	3700	6750	6180	4270
CFSM	1.65	.50	.39	.34	.29	.20	.20	1.27	3.10	4.56	4.00	3.43
IN.	1.91	.56	.45	.39	.31	.23	.22	1.46	3.45	5.26	4.62	3.83
AC-FT	203900	59600	48160	41850	32790	24620	23540	156100	369500	562600	493900	409900

CAL YR 1985 TOTAL 1580895 MEAN 4331 MAX 23400 MIN 480 CFSM 2.16 IN 29.32 AC-FT 3136000
WTR YR 1986 TOTAL 1223310 MEAN 3352 MAX 17000 MIN 380 CFSM 1.67 IN 22.69 AC-FT 2426000

15292700 TALKEETNA RIVER NEAR TALKEETNA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954, 1966 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
FEB								
11...	1305	20.0	207	8.30	0.0	758	12.2	84
11...	1310	40.0	204	8.40	0.0	758	12.2	84
11...	1315	60.0	200	8.30	0.0	758	12.3	85
11...	1320	80.0	195	8.30	0.0	758	12.3	85
11...	1325	100	186	8.40	0.0	758	12.3	85
MAY								
23...	1225	30.0	103	7.60	5.0	752	12.1	96
23...	1226	70.0	104	7.60	5.0	752	12.1	96
23...	1227	110	102	7.60	4.5	752	12.2	96
23...	1228	170	98	7.60	4.5	752	12.2	96
23...	1229	235	88	7.70	5.0	752	12.1	95
JUN								
26...	1125	31.0	112	7.60	9.5	748	10.1	91
26...	1126	66.0	112	7.60	9.5	748	10.7	95
26...	1127	121	111	7.60	9.5	748	10.7	95
26...	1128	171	109	7.60	9.5	748	10.5	94
26...	1129	246	108	7.60	9.5	748	10.3	92
AUG								
26...	1125	25.0	96	7.70	7.5	747	10.9	93
26...	1126	70.0	96	7.70	7.5	747	10.8	92
26...	1127	115	93	7.70	7.5	747	10.7	91
26...	1128	175	88	7.70	7.5	747	10.7	91
26...	1129	255	75	7.80	7.5	747	10.7	91

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
FEB											
11...	1330	315	642	0.70	K1	< 1	69	22	23	2.7	13
MAY											
23...	1230	325	3650	3.5	K4	--	34	5	11	1.5	5.9
JUN											
26...	1130	330	4680	2.0	K1	< 1	42	8	14	1.6	5.0
AUG											
26...	1130	337	8760	18	27	K7	37	5	12	1.6	4.5

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
FEB										
11...	1.4	48	47	57	0	13	21	< 0.10	9.3	115
MAY										
23...	1.2	29	29	35	0	9.6	8.6	< 0.10	6.0	57
JUN										
26...	0.90	34	34	41	0	9.8	6.7	< 0.10	6.4	62
AUG										
26...	1.0	33	32	39	0	9.2	4.1	< 0.10	6.7	57

K NON-IDEAL COLONY COUNT

15292700 TALKEETNA RIVER NEAR TALKEETNA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
FEB 11...	110	< 0.010	0.460	0.020	0.010	0.28	0.30	< 0.010	< 0.010	< 0.010
MAY 23...	61	< 0.010	0.320	0.030	0.020	0.37	0.40	0.090	< 0.010	< 0.010
JUN 26...	65	< 0.010	0.190	0.010	< 0.010	--	< 0.20	0.040	0.010	< 0.010
AUG 26...	58	< 0.010	0.200	0.040	0.020	0.16	0.20	0.040	< 0.010	< 0.010

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
FEB 11...	1330	160	< 1	22	< 0.5	< 1	< 1	< 3	1	11	3
JUN 26...	1130	40	< 1	14	< 0.5	2	< 1	< 3	2	24	< 5

DATE	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
FEB 11...	17	4	0.1	< 10	< 1	< 1	< 1	150	< 6	9
JUN 26...	[illegible]	3	< 0.1	< 10	1	< 1	< 1	72	< 6	7

DATE	GROSS ALPHA, DIS-SOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DIS-SOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DIS-SOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DIS-SOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DIS-SOLVED, EXTRAC-TION (UG/L) (80020)
FEB 11...	< 0.7	< 0.7	1.3	< 0.7	1.1	< 0.7	0.03	0.11

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
FEB 11...	1330	315	642	8	14	--	--	--	--	--
MAY 23...	1230	325	3650	174	1710	27	41	74	100	--
JUN 26...	1130	330	4680	106	1340	38	51	77	92	100
AUG 26...	1130	337	8760	200	4730	30	45	72	96	100

15292780 SUSITNA RIVER AT SUNSHINE

LOCATION.--Lat 62°10'42", long 150°10'30", in SE¼SW¼ sec.10, T.24 N., R.5 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 100 ft upstream from Parks Highway bridge, 1.6 mi downstream from Sunshine Creek, and 3.2 mi northwest of Sunshine.

DRAINAGE AREA.--11,100 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1981 to June 1986 (discontinued).

REVISED RECORDS.--WDR AK-83-1: 1982 (M).

GAGE.--Water-stage recorder. Elevation of gage is 270 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to May 28, 1982 at site 100 ft upstream on right bank at same datum.

REMARKS.--Estimated daily discharges: Oct. 20 to May 18. Records good except for periods of no gage-height record, Oct. 20-29, Feb. 6-7, and Feb. 12 to May 18, and periods with ice effect, Oct. 30 to Feb. 5 and Feb. 8-11, which are poor. Satellite telemetry at station.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 150,000 ft^3/s, July 11, 1981; minimum daily, about 2,600 ft^3/s, Apr. 2-14, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 10, 1971 had a peak discharge of 200,000 ft^3/s, gage height, about 62.0 ft, datum then in use for National Weather Service gage on downstream side of bridge near left bank. Flood of Oct. 11, 1986, had a peak discharge of 185,000 ft^3/s, from rating curve extended above 110,000 ft^3/s, gage height, 16.47 ft, from floodmarks.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period October 1985 to June 1986, 71,200 ft^3/s, June 18, gage height, 9.86 ft; minimum daily, about 2,600 ft^3/s, Apr. 2-14.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1985 TO JUNE 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	32700	7900	4800	3900	3500	3000	2700	5400	44600			
2	29100	7800	4800	3900	3500	2900	2600	5800	40500			
3	27500	7600	4800	3900	3500	2900	2600	6400	36800			
4	25900	7400	4700	3900	3500	2900	2600	7200	33800			
5	23600	7200	4700	3800	3500	2900	2600	8000	32600			
6	21700	7000	4600	3800	3500	2900	2600	8800	37400			
7	21200	6800	4600	3800	3500	2900	2600	9800	44700			
8	22100	6700	4500	3800	3500	2900	2600	9600	47000			
9	25500	6600	4500	3800	3500	2900	2600	10500	46100			
10	23200	6500	4500	3800	3500	2900	2600	11500	44200			
11	20900	6400	4400	3700	3500	2900	2600	12500	43000			
12	19100	6200	4400	3700	3500	2900	2600	13500	39500			
13	17900	6200	4400	3700	3500	2900	2600	15000	38800			
14	16700	6000	4300	3700	3500	2900	2600	16000	44700			
15	15700	6000	4300	3700	3500	2900	2700	18000	52900			
16	15300	5800	4300	3700	3400	2900	2800	19000	59200			
17	14500	5800	4200	3700	3400	2900	2800	20000	62200			
18	14000	5600	4200	3700	3400	2900	2900	22000	67300			
19	12600	5600	4200	3600	3400	2900	2900	23200	66900			
20	12000	5600	4200	3600	3300	2900	3000	24000	60700			
21	11500	5400	4100	3600	3300	2900	3100	27200	55300			
22	11000	5400	4100	3600	3300	2900	3300	31700	51500			
23	10600	5400	4100	3600	3200	2900	3400	37000	49700			
24	10200	5200	4100	3600	3200	2900	3600	39300	47300			
25	9800	5200	4000	3600	3100	2900	3800	39000	45800			
26	9500	5200	4000	3600	3100	2900	3900	39500	40800			
27	9200	5000	4000	3600	3000	2800	4100	40200	39400			
28	8900	5000	4000	3600	3000	2800	4500	39900	42000			
29	8600	4900	3900	3600	---	2700	4700	39700	44700			
30	8400	4900	3900	3500	---	2700	5000	40200	46700			
31	8200	---	3900	3500	---	2700	---	43300	---			
TOTAL	517100	182300	133500	114600	94600	89200	93000	683200	1406100			
MEAN	16680	6077	4306	3697	3379	2877	3100	22040	46870			
MAX	32700	7900	4800	3900	3500	3000	5000	43300	67300			
MIN	8200	4900	3900	3500	3000	2700	2600	5400	32600			
CFSM	1.50	.55	.39	.33	.30	.26	.28	1.99	4.22			
IN.	1.73	.61	.45	.38	.32	.30	.31	2.29	4.71			
AC-FT	1026000	361600	264800	227300	187600	176900	184500	1355000	2789000			

CAL YR 1985 TOTAL 8982200 MEAN 24610 MAX 100000 MIN 3500 CFSM 2.22 IN 30.10 AC-FT 17820000

15292780 SUSITNA RIVER AT SUNSHINE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1971, 1975, 1977, and 1981 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 1981 to September 1985 (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
MAR								
18...	1520	125	221	7.80	0.0	753	12.1	84
18...	1525	175	221	7.80	0.0	753	12.2	84
18...	1530	225	221	7.80	0.0	753	12.3	85
18...	1535	275	221	8.00	0.0	753	12.3	85
18...	1540	300	221	8.00	0.0	753	12.4	86
MAY								
22...	0905	90.0	--	7.80	3.5	755	12.4	--
22...	0910	140	--	7.80	3.5	755	12.4	--
22...	0915	215	--	7.70	3.5	755	12.4	--
22...	0920	290	--	7.70	3.5	755	12.4	--
22...	0925	365	--	7.70	3.5	755	12.4	--
JUN								
25...	1210	70.0	118	8.20	9.0	764	10.5	91
25...	1211	145	119	8.10	9.0	764	10.8	93
25...	1212	220	121	8.20	8.5	764	10.8	92
25...	1213	295	121	8.20	8.0	764	11.1	94
25...	1214	395	122	8.20	8.0	764	11.2	94

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	TUR- BID- ITY (NTU) (00076)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
MAR										
18...	1545	425	2860	1.0	90	26	29	4.3	10	1.9
MAY										
22...	0930	595	30700	45	40	7	13	1.9	3.5	1.4
JUN										
25...	1215	645	46600	190	52	11	17	2.4	2.9	1.6

DATE	ALKA- LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L - CACO3) (99430)	BICAR- BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR- BONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)
MAR										
18...	66	64	79	0	18	19	0.10	9.4	132	130
MAY										
22...	34	33	40	0	9.7	4.9	<0.10	5.0	77	59
JUN										
25...	41	41	50	0	14	3.5	0.10	4.7	77	71

DATE	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN, ORGANIC DIS- SOLVED (MG/L AS N) (00607)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITRO- GEN,NH4 + ORG. SUSP. TOTAL (MG/L AS N) (00624)
MAR									
18...	--	0.300	0.260	<0.010	<0.010	--	--	0.20	0.0
MAY									
22...	<0.010	--	0.160	0.050	0.050	0.45	--	0.50	--
JUN									
25...	--	<0.100	<0.100	0.050	0.010	0.35	0.19	0.40	0.20

15292780 SUSITNA RIVER AT SUNSHINE--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN, TOTAL (MG/L AS N) (00600)	NITROGEN DISSOLVED (MG/L AS N) (00602)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DISSOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUSPENDED TOTAL (MG/L AS C) (00689)
MAR									
18...	0.30	0.50	0.56	0.010	<0.010	<0.010	<0.010	1.1	0.1
MAY									
22...	--	--	--	0.220	0.010	0.020	<0.010	--	--
JUN									
25...	0.20	--	--	0.380	0.010	0.030	<0.010	1.3	0.5

DATE	TIME	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC SUSPENDED TOTAL (UG/L AS AS) (01001)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, SUSPENDED RECOVERABLE (UG/L AS BA) (01006)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, TOTAL RECOVERABLE (UG/L AS CO) (01037)
MAR												
18...	1545	2	1	1	100	60	41	<1	<1	<10	<10	<1
JUN												
25...	1215	8	7	1	200	200	27	5	<1	40	<10	8

DATE	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE) (01044)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, DISSOLVED (UG/L AS PB) (01049)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN) (01054)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)
MAR												
18...	<1	5	<1	170	160	12	1	<1	20	20	3	<0.10
JUN												
25...	<1	55	<1	20000	20000	130	13	<5	370	360	8	<0.10

DATE	MERCURY DISSOLVED (UG/L AS HG) (71890)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	NICKEL, SUSPENDED RECOVERABLE (UG/L AS NI) (01066)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SELENIUM, SUSPENDED TOTAL (UG/L AS SE) (01146)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	SILVER, DISSOLVED (UG/L AS AG) (01075)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, SUSPENDED RECOVERABLE (UG/L AS ZN) (01091)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
MAR												
18...	<0.1	7	--	<1	1	0	1	<1	<1	20	0	31
JUN												
25...	<0.1	28	27	1	1	--	<1	<1	<1	70	--	<3

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)
MAR							
18...	1545	425	2860	4	31	--	--
MAY							
22...	0930	595	30700	582	48200	7	11
JUN							
25...	1215	645	46600	488	61400	27	37

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)
MAR							
18...	--	--	--	--	--	--	--
MAY							
22...	16	19	33	47	59	70	100
JUN							
25...	47	56	63	72	78	92	100

15294005 WILLOW CREEK NEAR WILLOW

LOCATION.--Lat 61°46'51", long 149°53'04", in NW¼SE¼ sec.31, T.20 N., R.3 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank 0.9 mi downstream from unnamed tributary, 5.5 mi northeast of Willow, and 6.7 mi upstream from Deception Creek.

DRAINAGE AREA.--166 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1978 to current year.

REVISED RECORDS.--WDR AK-80-1: 1979 (M).

GAGE.--Water-stage recorder. Elevation of gage is 350 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 2, 1981 at site 0.2 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 1-3 and Oct. 26 to May 5. Records fair except for period of no gage-height record, Oct. 1-3, and period of ice effect, Oct. 26 to May 5, which are poor.

AVERAGE DISCHARGE.--8 years, 401 ft^3/s, 32.81 in/yr, 290,500 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,450 ft^3/s, July 28, 1980, gage height, 8.80 ft, site and datum then in use; minimum daily, about 33 ft^3/s, Mar. 9-30, 1982.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 2,300 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Nov. 2	1700	Ice jam	*6.84	Sept.21	0800	2,520	5.42
July 20	1930	*2,980	5.67				

Minimum daily discharge, about 36 ft^3/s, Apr. 5-15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	750	180	95	75	60	38	38	150	754	490	783	521
2	700	190	95	75	60	40	38	280	560	460	640	558
3	650	190	95	75	60	40	38	270	534	432	572	528
4	631	180	95	75	60	42	38	250	502	437	521	502
5	595	170	95	75	60	42	36	230	514	421	539	466
6	571	160	95	70	60	44	36	287	630	404	538	437
7	558	150	95	70	60	44	36	312	737	367	485	443
8	608	140	95	70	60	44	36	237	716	372	545	501
9	789	140	95	70	60	44	36	212	632	399	546	593
10	620	130	100	70	60	44	36	208	560	357	521	473
11	533	130	105	70	60	44	36	220	512	380	547	426
12	496	130	110	70	60	44	36	234	583	431	764	409
13	455	130	100	70	55	44	36	291	693	772	876	377
14	404	130	95	70	55	44	36	270	790	653	696	351
15	404	130	95	70	55	44	36	236	815	499	666	341
16	389	130	95	70	55	44	38	253	862	472	652	398
17	351	120	95	70	55	44	40	280	846	432	587	676
18	341	120	90	70	55	44	42	264	711	393	631	730
19	254	120	90	70	50	44	44	269	619	367	730	599
20	262	120	90	70	50	44	48	348	618	1170	605	1630
21	335	120	85	70	45	42	65	381	522	1360	553	2230
22	322	110	85	65	45	42	60	403	514	846	568	1530
23	298	110	85	65	45	42	66	413	577	958	537	1220
24	266	110	85	65	42	42	75	503	533	1120	729	963
25	236	100	90	65	42	42	70	557	479	991	660	816
26	266	100	85	65	38	40	70	598	453	1530	625	707
27	200	100	80	65	38	40	75	615	490	1120	598	666
28	190	100	80	65	38	40	80	638	502	881	638	659
29	170	95	80	65	---	40	85	715	502	747	598	612
30	170	95	80	65	---	40	110	753	467	660	534	781
31	170	---	80	65	---	40	---	814	---	810	498	---
TOTAL	12984	3930	2835	2145	1483	1312	1516	11491	18233	20731	18982	21143
MEAN	419	131	91.5	69.2	53.0	42.3	50.5	371	608	669	612	705
MAX	789	190	110	75	60	44	110	814	862	1530	876	2230
MIN	170	95	80	65	38	38	36	150	453	357	485	341
CFSM	2.52	.79	.55	.42	.32	.26	.30	2.24	3.66	4.03	3.69	4.25
IN.	2.91	.88	.64	.48	.33	.29	.34	2.58	4.09	4.65	4.25	4.74
AC-FT	25750	7800	5620	4250	2940	2600	3010	22790	36170	41120	37650	41940

CAL YR 1985 TOTAL 180448 MEAN 494 MAX 2760 MIN 60 CFSM 2.98 IN 40.44 AC-FT 357900
WTR YR 1986 TOTAL 116785 MEAN 320 MAX 2230 MIN 36 CFSM 1.93 IN 26.17 AC-FT 231600

15294005 WILLOW CREEK NEAR WILLOW--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1979 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: October 1978 to current year (seasonal, fragmentary).

INSTRUMENTATION.--Digital-water-temperature recorder October 1978 to July 1986, set for one-hour-interval punches. Electronic water temperature recorder since September 1986, set for one-hour recording intervals.

REMARKS.--No record Oct. 17 to May 10 during winter shutdown and July 29 to Sept. 11, due to recorder malfunctions. Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the average for the creek by temperature cross sections on May 23 and Sept. 12. A maximum variation of 0.2°C was found within the cross sections. A maximum variation between mean stream temperature and temperature at the probe was 0.1°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 16.0°C, July 28, 1983 and July 10, 11, 19, 20, 1986; minimum, 0.0°C, many days during winter period.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 16.0°C July 10, 11, 19, 20, but may have been higher during period of no temperature record, July 29 to Sept. 11; minimum, 0.0°C, on many days during winter.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN	DAY	MAX	MIN
	OCTOBER			OCTOBER			OCTOBER			OCTOBER	
1	5.0	3.5	6	3.0	1.5	11	2.5	2.0	16	2.5	---
2	4.5	3.0	7	4.0	3.0	12	3.0	1.5			
3	4.0	3.0	8	4.5	3.5	13	3.0	1.5			
4	3.5	1.0	9	4.5	3.0	14	2.0	1.0			
5	2.5	.5	10	3.0	1.0	15	2.5	1.0			

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	6.0	3.5	14.0	10.5			---	---
2			---	---	7.0	3.5	12.5	10.0			---	---
3			---	---	7.5	4.5	14.5	9.5			---	---
4			---	---	8.0	4.5	14.0	10.0			---	---
5			---	---	8.5	5.0	15.5	10.5			---	---
6			---	---	11.0	5.5	15.0	11.5			---	---
7			---	---	9.5	4.5	14.0	11.0			---	---
8			---	---	8.0	5.0	11.5	10.0			---	---
9			---	---	8.0	4.5	14.0	10.0			---	---
10			---	---	7.0	5.0	16.0	11.5			---	---
11			2.0	.0	10.0	5.0	16.0	11.0			---	---
12			3.0	.0	12.0	5.0	14.0	10.5			8.5	---
13			2.0	.0	12.5	5.5	11.0	9.0			9.5	6.0
14			2.0	.0	12.0	5.5	13.0	8.5			9.0	6.0
15			2.5	.0	14.0	7.0	12.5	9.5			9.0	6.5
16			4.0	.0	13.0	6.5	11.0	8.5			9.0	8.5
17			3.0	.5	11.0	7.5	15.5	9.5			8.5	8.0
18			3.5	1.0	9.0	6.5	15.0	11.5			8.5	7.0
19			4.5	1.5	12.5	7.0	16.0	12.5			8.0	7.0
20			5.0	1.0	12.0	7.5	16.0	10.5			7.5	6.5
21			6.5	1.5	10.5	6.5	13.0	8.5			7.5	6.0
22			6.0	2.5	10.0	7.5	11.5	8.0			6.0	5.5
23			7.5	2.0	9.0	6.5	10.0	8.5			5.5	3.5
24			8.5	2.5	8.5	6.0	10.0	8.0			4.0	1.5
25			7.0	3.0	10.0	6.5	9.0	7.5			3.0	.0
26			7.0	4.0	12.5	6.5	11.0	7.0			3.5	.0
27			6.0	3.0	14.0	8.0	12.0	6.0			4.5	3.0
28			8.5	3.5	14.0	8.5	12.5	7.5			5.5	4.0
29			7.5	3.0	13.0	9.0	---	---			5.5	4.0
30			10.0	4.0	15.0	10.0	---	---			6.0	5.5
31			7.5	3.5	---	---	---	---			---	---
MONTH			10.0	.0	15.0	3.5	16.0	6.0				.0

15294100 DESHKA RIVER NEAR WILLOW

LOCATION.--Lat 61°46'05", long 150°20'13, in SW¼NE¼ sec.3, T.19 N., R.6 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank 0.2 mi upstream from unnamed tributary, 1.1 mi downstream from unnamed tributary, 7.9 mi upstream from mouth, and 10 mi west of Willow.

DRAINAGE AREA.--592 mi^2.

PERIOD OF RECORD.--October 1978 to September 1986 (discontinued).

REVISED RECORDS.--WDR AK-83-1: 1980.

GAGE.--Water-stage recorder. Elevation of gage is 80 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 26 to May 14, July 11-14, 16-20, and July 22 to Sept. 9. Records fair except for periods of no gage-height record, Nov. 16 to Mar. 31, May 4-14, July 11-14, 16-20, and July 22 to Sept. 9 and periods with ice effect, Oct. 26 to Nov. 15 and Apr. 1 to May 3, which are poor.

AVERAGE DISCHARGE.--8 years, 892 ft^3/s, 20.46 in/yr, 646,300 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 9,920 ft^3/s, Nov. 13, 1979, gage height, 8.16 ft; maximum gage height, 11.21 ft, Apr. 30, 1983, ice jam; minimum daily, about 160 ft^3/s, Feb. 24 to Mar. 8, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 12, 1986, reached a stage of 13.54 ft, from floodmarks; discharge, 48,000 ft^3/s on basis of slope-area measurement of peak flow 7.0 miles upstream from station. A discharge of 143 ft^3/s was measured on Mar. 13, 1978.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 3,600 ft^3/s and maximum (*):

Date	Time	Discharge (ft^3/s)	Gage height (ft)	Date	Time	Discharge (ft^3/s)	Gage height (ft)
Oct. 1	0030	a4,040	4.42	Sept.23	0530	*5,420	*5.37
Oct. 10	1830	4,290	4.58				

a Occurred on recession following peak of Sept. 29, 1985.

Minimum daily discharge, about 160 ft^3/s, Feb. 24 to Mar. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3600	370	230	210	180	160	180	1900	564	284	1000	1600
2	2890	350	230	210	190	160	180	2100	572	290	1200	1800
3	2320	340	230	210	190	160	180	2200	533	284	1100	2300
4	2010	330	230	210	180	160	180	2200	517	278	900	2800
5	1740	310	230	210	180	160	180	2100	502	278	750	3000
6	1520	300	230	220	180	160	180	1900	487	272	700	2500
7	1470	300	230	220	190	160	170	1800	479	272	650	2000
8	1780	290	220	210	200	160	170	1800	464	278	600	2300
9	2910	280	240	210	200	170	170	1900	457	278	650	2800
10	3900	290	250	200	210	170	170	2000	472	266	800	2410
11	3410	310	250	200	210	170	170	1900	494	270	1100	1840
12	2370	300	250	200	210	170	170	1900	547	340	2000	1480
13	1890	290	240	200	200	180	170	1800	502	450	3300	1250
14	1590	280	230	200	200	180	170	1700	457	640	3200	1120
15	1390	280	220	200	190	190	170	1580	435	588	2400	1040
16	1300	270	220	200	190	190	170	1400	414	500	1900	979
17	1270	270	210	190	180	200	180	1280	393	470	1600	1010
18	1170	260	210	190	170	200	180	1120	380	450	1300	1190
19	1000	260	220	190	170	210	180	1040	366	430	1200	1370
20	956	250	220	180	170	220	190	949	360	420	1400	1930
21	862	250	230	180	170	220	210	881	360	421	1700	3630
22	824	240	240	180	170	220	250	843	353	430	2200	4730
23	615	240	250	180	170	220	270	790	340	450	2500	5000
24	637	240	270	170	160	210	240	743	327	500	2100	3300
25	549	240	270	170	160	200	290	699	327	640	1900	2390
26	600	250	260	170	160	200	360	664	321	850	2200	1910
27	540	240	250	170	160	190	500	647	315	1100	2100	1630
28	500	230	240	170	160	190	700	621	309	1000	2000	1490
29	470	230	230	170	---	180	1300	597	296	850	1800	1460
30	430	230	220	170	---	180	1700	572	290	750	2000	1480
31	400	---	220	180	---	180	---	556	---	800	1800	---
TOTAL	46913	8320	7270	5970	5100	5720	9330	42182	12633	15129	50050	63739
MEAN	1513	277	235	193	182	185	311	1361	421	488	1615	2125
MAX	3900	370	270	220	210	220	1700	2200	572	1100	3300	5000
MIN	400	230	210	170	160	160	170	556	290	266	600	979
CFSM	2.56	.47	.40	.33	.31	.31	.53	2.30	.71	.82	2.73	3.59
IN.	2.95	.52	.46	.38	.32	.36	.59	2.65	.79	.95	3.15	4.01
AC-FT	93050	16500	14420	11840	10120	11350	18510	83670	25060	30010	99270	126400

CAL YR 1985 TOTAL 412969 MEAN 1131 MAX 8040 MIN 190 CFSM 1.91 IN 25.95 AC-FT 819100
WTR YR 1986 TOTAL 272356 MEAN 746 MAX 5000 MIN 160 CFSM 1.26 IN 17.11 AC-FT 540200

15294345 YENTNA RIVER NEAR SUSITNA STATION

LOCATION.--Lat 61°41'55", long 150°39'02", in NW¼ sec.36, T.19 N., R.8 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on right bank 12 mi upstream from mouth and 14 mi northwest of Susitna Station.

DRAINAGE AREA.--6,180 mi^2, approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1980 to June 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 80 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 25 to May 6. Records good except for period of no gage-height record, Dec. 6 to Mar. 31, and periods with ice effect, Oct. 25 to Dec.5 and Apr. 1 to May 6, which are poor. Satellite telemetry at station.

AVERAGE DISCHARGE.--5 years (water years 1981-85), 20,300 ft^3/s, 44.60 in/yr, 14,710,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 116,000 ft^3/s, Aug. 13, 1981, gage height, 18.61 ft; minimum daily, about 2,000 ft^3/s, Mar. 21 to Apr. 10, 1982.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 12, 1986, reached a stage of 19.21 ft, from flood marks; discharge, 130,000 ft^3/s.

EXTREMES FOR CURRENT YEAR.--Maximum discharge during period, October 1985 to June 1986, 70,700 ft^3/s, June 18, gage-height, 14.72 ft; minimum daily, about 2,200 ft^3/s, Apr. 7-8.

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER 1985 TO JUNE 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	45200	5800	3900	3500	3100	2700	2300	6600	39200			
2	35100	5700	3800	3500	3100	2600	2300	8000	37300			
3	28900	5600	3800	3500	3000	2600	2300	10000	34600			
4	25600	5500	3800	3500	3000	2600	2300	12000	34800			
5	22400	5400	3800	3400	3000	2600	2300	16000	33600			
6	19800	5400	3800	3400	3000	2600	2300	22000	32000			
7	18900	5300	3700	3400	3000	2600	2200	24600	32000			
8	20000	5200	3700	3400	3000	2600	2200	23500	34400			
9	28900	5200	3800	3400	3000	2600	2300	21000	37600			
10	29800	5400	4000	3400	3000	2600	2300	17900	37500			
11	22900	5600	3900	3300	3000	2500	2300	16900	41400			
12	18800	5400	3800	3300	3000	2500	2300	19300	39500			
13	16500	5200	3700	3300	3000	2500	2300	22500	37200			
14	15200	5000	3600	3300	3000	2500	2300	23000	39900			
15	13800	4900	3500	3300	3000	2500	2400	22900	46800			
16	13400	4800	3500	3300	3000	2500	2500	22800	54900			
17	13100	4700	3500	3300	3000	2500	2500	23400	64700			
18	12200	4600	3500	3300	3000	2500	2600	24400	69700			
19	11400	4600	3700	3200	2900	2500	2700	24000	67700			
20	10200	4500	3900	3200	2900	2500	2700	23700	63500			
21	9540	4400	4000	3200	2900	2500	2800	24600	61500			
22	9530	4400	4000	3200	2800	2400	3000	24400	52700			
23	8910	4300	3900	3200	2800	2400	3100	24400	49800			
24	8120	4300	3900	3200	2800	2400	3300	25300	47300			
25	7500	4200	3800	3200	2700	2400	3500	28000	42800			
26	7000	4100	3800	3100	2700	2400	3800	30900	38900			
27	6600	4100	3700	3100	2700	2400	4000	33000	36400			
28	6400	4000	3600	3100	2700	2400	4400	33100	38000			
29	6200	3900	3600	3100	---	2400	4800	33000	43900			
30	6000	3900	3500	3100	---	2300	5400	34300	48600			
31	5900	---	3500	3100	---	2300	---	37200	---			
TOTAL	503800	145400	116000	101800	82100	77400	85500	712700	1338200			
MEAN	16250	4847	3742	3284	2932	2497	2850	22990	44610			
MAX	45200	5800	4000	3500	3100	2700	5400	37200	69700			
MIN	5900	3900	3500	3100	2700	2300	2200	6600	32000			
CFSM	2.63	.78	.61	.53	.47	.40	.46	3.72	7.22			
IN.	3.03	.88	.70	.61	.49	.47	.51	4.29	8.06			
AC-FT	999300	288400	230100	201900	162800	153500	169600	1414000	2654000			

CAL YR 1985 TOTAL 7294800 MEAN 19990 MAX 69000 MIN 2400 CFSM 3.24 IN 43.91 AC-FT 14470000

15294345 YENTNA RIVER NEAR SUSITNA STATION--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1981 to June 1986 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 1981 to June 1986 (seasonal).

INSTRUMENTATION.--1981. Digital water temperature recorder May 1981 to Oct. 1984. Electronic water temperature recorder since May 1985, set for one-hour recording interval.

REMARKS.--No record Oct. 1 to May 21, when recorder was shut down. Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by a temperature cross section on May 21. A maximum variation of 0.4°C was found within the cross section. The maximum variation between mean stream temperature and temperature at the probe was 0.6°C.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Minimum, 0.0°C many days during winter periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 17.0°C, July 20, 1982.

EXTREMES FOR CURRENT PERIOD.--May to June 1986:
WATER TEMPERATURE: Maximum, for period, 13.0°C, June 30.

TEMPERATURE, WATER (DEG. C), MAY TO JUNE 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	8.0	7.0						
2			---	---	8.0	6.5						
3			---	---	7.0	6.5						
4			---	---	6.5	6.0						
5			---	---	7.0	6.0						
6			---	---	8.0	6.5						
7			---	---	9.5	7.5						
8			---	---	9.0	8.5						
9			---	---	9.0	8.0						
10			---	---	8.0	7.0						
11			---	---	8.0	6.0						
12			---	---	9.5	7.0						
13			---	---	11.5	9.0						
14			---	---	12.0	10.0						
15			---	---	12.5	11.0						
16			---	---	12.0	11.0						
17			---	---	11.5	10.5						
18			---	---	11.0	9.5						
19			---	---	10.0	8.0						
20			---	---	9.5	9.0						
21			---	---	9.0	7.5						
22			8.5	6.0	9.0	7.5						
23			9.0	5.5	9.5	9.0						
24			9.5	6.5	9.0	8.0						
25			9.0	7.5	9.0	7.5						
26			8.5	7.0	9.5	7.5						
27			8.5	7.0	10.5	9.0						
28			9.0	6.5	12.5	10.0						
29			9.0	7.5	12.5	11.0						
30			9.5	8.0	13.0	11.0						
31			9.0	7.5	---	---						
MONTH					13.0	6.0						

15294350 SUSITNA RIVER AT SUSITNA STATION
(National stream-quality accounting network station)

LOCATION.--Lat 61°32'41", long 150°30'45", in SE¼SE¼ sec.22, T.17 N., R.7 W., Matanuska-Susitna Borough, Hydrologic Unit 19050002, on left bank at Susitna Station, 1.5 mi downstream from Yentna River, and 12.5 mi upstream from Alexander Creek.

DRAINAGE AREA.--19,400 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1974 to current year.

REVISED RECORD.--WDR AK-82-1: 1980.

GAGE.--Water-stage recorder. Elevation of gage is 40 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 20 to May 19, May 22-26, and Sept. 19-24. Records good except for periods of no gage-height record, May 22-26 and Sept. 19-24, which are fair, and Oct. 20 to May 19, which are poor. Satellite telemetry installed July 1986.

AVERAGE DISCHARGE.--12 years, 49,040 ft³/s, 34.33 in/yr, 35,530,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 230,000 ft³/s, July 29, 1980 and Aug. 16, 1981; maximum gage height, 20.27 ft, Aug. 16, 1981; minimum daily discharge, about 5,000 ft³/s, Mar. 18 to Apr. 13, 1982.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 167,000 ft³/s, July 22, gage height, 16.92 ft; minimum daily, about 5,400 ft³/s, Mar. 29 to Apr. 8.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	96000	25000	13000	10000	8200	6600	5400	15000	81000	101000	98800	100000
2	83900	24000	12000	10000	8200	6400	5400	17000	78900	107000	99900	92700
3	75600	23000	12000	9500	8200	6400	5400	19000	72100	118000	94600	88100
4	71600	23000	12000	9500	8200	6400	5400	23000	69900	128000	97400	85000
5	67600	23000	12000	9500	8200	6200	5400	28000	67600	135000	108000	80100
6	62900	22000	12000	9500	8000	6200	5400	38000	67700	138000	116000	73000
7	60000	22000	12000	9000	8000	6000	5400	45000	71800	139000	108000	69100
8	60400	22000	11000	9000	8000	6000	5400	43000	78900	135000	95300	75800
9	69600	22000	11000	9000	8200	6000	5600	40000	83600	125000	95000	101000
10	74200	22000	11000	9000	8200	6000	5600	38000	81700	118000	105000	92800
11	65600	21000	11000	9000	8200	6000	5600	36000	81600	117000	115000	79900
12	58400	20000	11000	9000	8200	6000	5600	40000	79400	117000	120000	71800
13	54100	20000	11000	9000	8200	6000	5800	46000	74800	118000	142000	67100
14	51100	19000	11000	9000	8200	6000	6000	50000	78500	135000	136000	63100
15	48600	18000	11000	9000	8200	6200	6200	48000	92000	128000	118000	60400
16	47500	18000	11000	9000	8000	6200	6400	48000	109000	118000	109000	59500
17	46700	17000	11000	9000	8000	6200	6600	50000	122000	110000	95600	63400
18	45000	17000	11000	9000	7800	6000	6800	52000	130000	107000	87500	71700
19	43700	17000	11000	9000	7600	6000	7000	50000	134000	113000	84400	80000
20	42000	17000	11000	9000	7400	6000	7200	49700	125000	122000	81700	84000
21	40000	16000	11000	8500	7200	6000	7600	51100	120000	153000	78900	90000
22	38000	15000	11000	8500	7200	6000	8000	52000	108000	157000	77400	95000
23	36000	15000	11000	8500	7200	5800	8400	54000	103000	146000	82400	93000
24	34000	14000	11000	8500	7000	5800	8800	54000	98300	155000	82300	89000
25	33000	14000	11000	8500	7000	5800	9000	58000	92400	152000	84400	78100
26	30000	14000	11000	8500	6800	5600	9400	65000	86600	136000	83900	68800
27	29000	14000	11000	8000	6800	5600	10500	70300	80000	133000	94500	63100
28	28000	13000	10000	8000	6600	5600	11500	73000	80600	119000	117000	59500
29	27000	13000	10000	8000	---	5400	12000	72500	87700	108000	126000	57800
30	26000	13000	10000	8000	---	5400	13000	73500	93900	100000	114000	56700
31	26000	---	10000	8000	---	5400	---	76300	---	98100	105000	---
TOTAL	1571500	553000	345000	275000	217000	185200	215800	1475400	2730000	3886100	3153000	2309500
MEAN	50690	18430	11130	8871	7750	5974	7193	47590	91000	125400	101700	76980
MAX	96000	25000	13000	10000	8200	6600	13000	76300	134000	157000	142000	101000
MIN	26000	13000	10000	8000	6600	5400	5400	15000	67600	98100	77400	56700
CFSM	2.61	.95	.57	.46	.40	.31	.37	2.45	4.69	6.46	5.24	3.97
IN.	3.01	1.06	.66	.53	.42	.36	.41	2.83	5.23	7.45	6.05	4.43
AC-FT	3117000	1097000	684300	545500	430400	367300	428000	2926000	5415000	7708000	6254000	4581000

CAL YR 1985 TOTAL 18182800 MEAN 49820 MAX 198000 MIN 6500 CFSM 2.57 IN 34.87 AC-FT 36070000
WTR YR 1986 TOTAL 16916500 MEAN 46350 MAX 157000 MIN 5400 CFSM 2.39 IN 32.44 AC-FT 33550000

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1955, 1970, 1975 to September 1986 (discontinued).

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 1975 to October 1980 (Seasonal), May 1983 to September 1986 (seasonal).

INSTRUMENTATION.--Digital water temperature recorder May 1975 to Oct. 1980 and May 1983 to Oct. 1984. Electronic water temperature recorder since May 1985, set for one-hour recording intervals.

REMARKS.--No record Oct. 1 to May 20 and Sept. 26-30, when recorder was shut down. Records represent water temperature at the sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross sections on Dec. 4, May 21, July 29, and Sept. 25. A maximum variation of 1.4°C was found within the cross sections. A maximum variation between mean stream temperature and temperature at the probe was 1.0°C.

EXTREMES OUTSIDE PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Minimum, 0.0°C on many days during winter periods.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 16.5°C, July 9, 1976 and July 3, 4, 1979.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 16.0°C, June 30 and July 1.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
DEC								
04...	1420	170	165	7.50	0.0	734	10.6	75
04...	1421	720	193	--	0.0	734	10.5	75
04...	1422	895	198	7.60	0.0	734	10.5	75
MAY								
21...	1125	170	--	7.60	7.0	758	11.3	--
21...	1126	470	--	7.70	6.5	758	11.3	--
21...	1127	820	--	7.60	6.0	758	11.5	--
21...	1128	945	--	7.60	5.5	758	11.6	--
21...	1129	1100	--	7.60	5.5	758	11.8	--
JUL								
29...	1225	90.0	109	8.20	11.0	766	9.7	87
29...	1226	215	111	8.30	9.5	766	10.2	89
29...	1227	340	108	8.30	10.5	766	10.1	90
29...	1228	640	117	8.40	10.0	766	10.0	88
29...	1229	1540	118	8.40	9.5	766	9.9	86
SEP								
25...	1440	90.0	110	8.20	3.0	676	11.3	94
25...	1441	165	108	8.20	3.0	676	11.6	97
25...	1442	265	111	8.20	3.0	676	11.8	99
25...	1443	440	120	8.20	3.0	676	11.7	98
25...	1444	1140	129	8.30	3.0	676	11.8	99

DATE	TIME (00004)	STREAM WIDTH (FT) (00061)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00076)	TUR- BID- ITY (NTU) (31625)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31673)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (00900)	HARD- NESS (MG/L AS CACO3) (00902)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00915)	CALCIUM DIS- SOLVED (MG/L AS CA) (00925)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00930)	SODIUM, DIS- SOLVED (MG/L AS NA)
DEC											
04...	1425	1000	12200	15	K1	K6	85	18	27	4.2	6.8
MAY											
21...	1130	1250	48500	32	K4	K1	42	9	13	2.2	3.1
JUL											
29...	1230	1880	114000	230	K6	K3	56	10	18	2.6	2.4
SEP											
25...	1445	1880	79200	75	--	--	52	9	16	2.8	2.8

K NON-IDEAL COLONY COUNT

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)
DEC 04...	1.8	66	67	81	0	17	9.9	0.20	10	119
MAY 21...	1.3	35	33	41	0	10	4.0	0.10	6.6	66
JUL 29...	1.8	46	46	56	0	16	2.3	0.10	5.3	80
SEP 25...	1.5	*43	--	--	--	20	3.1	0.10	7.4	95

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)
DEC 04...	120	<0.010	0.280	0.030	0.040	0.27	0.30	0.010	0.010	0.010
MAY 21...	60	<0.010	0.340	0.050	0.030	0.45	0.50	0.130	0.010	<0.010
JUL 29...	77	<0.010	<0.100	0.060	0.010	0.34	0.40	0.330	0.040	<0.010
SEP 25...	80	<0.010	0.160	0.050	0.040	0.15	0.20	0.170	0.020	0.010

DATE	SOLVED TIME	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DIS- (UG/L AS PB) (01049)
DEC 04...	1425	<10	4	38	<0.5	1	<1	<3	3	40	1
JUL 29...	1230	350	2	32	<0.5	<1	<1	<3	2	380	<5
SEP 25...	1445	150	1	25	<0.5	<1	1	<3	3	230	<5

DATE	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
DEC 04...	15	21	0.1	<10	1	1	<1	160	<6	18
JUL 29...	9	12	0.1	<10	<1	<1	<1	89	<6	8
SEP 25...	<4	12	3.0	<10	1	<1	<1	94	<6	6

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)
DEC 04...	1425	1000	12200	7	231	--	--
MAY 21...	1130	1250	48500	276	36100	--	--
JUL 29...	1230	1880	114000	820	252000	19	27
SEP 25...	1445	1880	79200	378	80800	11	16

* LABORATORY ALKALINITY VALUE

15294350 SUSITNA RIVER AT SUSITNA STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)
DEC							
04...	--	--	--	--	--	--	--
MAY							
21...	--	--	--	42	54	83	100
JUL							
29...	36	45	54	65	76	86	100
SEP							
25...	21	26	34	47	68	90	100

TEMPERATURE, WATER (DEG. C), MAY TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1			---	---	10.5	9.0	16.0	14.5	10.5	9.0	10.5	10.0
2			---	---	9.5	8.5	15.5	14.0	11.0	10.0	10.0	9.0
3			---	---	9.0	8.0	15.5	14.0	12.0	10.5	10.5	9.5
4			---	---	9.5	8.5	15.5	14.0	12.0	11.0	10.5	9.5
5			---	---	10.0	9.0	15.5	13.5	12.5	11.5	11.0	9.5
6			---	---	12.0	9.5	15.0	13.5	12.0	10.5	11.0	9.5
7			---	---	12.0	11.0	14.5	13.5	11.5	10.5	10.0	9.0
8			---	---	11.5	10.0	13.5	12.5	11.0	10.0	9.5	9.0
9			---	---	11.0	10.0	14.5	12.5	10.5	9.5	9.5	8.5
10			---	---	10.5	9.0	14.5	12.5	10.0	10.0	9.5	8.5
11			---	---	11.0	9.0	14.5	13.0	11.0	9.5	9.5	8.5
12			---	---	12.5	10.0	14.0	12.0	11.0	10.5	9.5	8.0
13			---	---	13.5	11.0	12.0	11.0	10.5	9.5	9.5	8.5
14			---	---	14.5	12.5	12.5	11.0	10.5	9.5	10.0	9.0
15			---	---	15.5	13.5	12.5	11.5	10.5	9.5	10.0	9.0
16			---	---	15.0	13.5	12.5	11.5	11.5	9.5	10.5	10.0
17			---	---	14.5	13.0	14.0	11.5	11.5	10.0	10.5	10.0
18			---	---	13.5	12.5	14.5	13.0	11.5	10.5	10.5	10.0
19			---	---	13.5	11.5	15.0	13.0	11.0	9.5	10.5	9.5
20			---	---	13.0	12.0	14.5	12.0	11.0	10.0	9.5	9.0
21			7.5	6.0	12.5	11.5	12.5	11.5	11.0	10.0	9.5	8.5
22			7.5	6.0	12.5	11.5	12.5	10.5	11.0	10.0	9.0	8.0
23			8.0	5.0	12.5	11.0	10.5	9.5	11.5	9.0	8.0	6.5
24			8.0	6.0	12.0	10.5	10.5	9.5	9.0	8.0	7.0	6.0
25			8.0	7.0	12.0	10.5	10.5	9.0	8.0	7.5	6.0	4.0
26			8.5	7.0	13.0	11.0	10.0	8.5	9.5	8.5	---	---
27			9.0	7.5	14.5	12.0	11.5	9.0	10.5	9.5	---	---
28			10.5	8.5	15.0	13.5	12.0	10.5	11.0	10.0	---	---
29			11.5	9.0	15.5	13.5	12.5	11.0	11.0	10.0	---	---
30			11.0	9.5	16.0	14.0	12.0	11.0	10.5	10.0	---	---
31			11.0	10.0	---	---	11.5	10.0	10.5	10.0	---	---
MONTH			11.5		16.0	8.0	16.0	8.5	12.5	7.5	11.0	

15294450 CHUITNA RIVER NEAR TYONEK

LOCATION.--Lat 61°06'31", long 151°15'07", in NE¼NE¼ sec.29, T.12 N., R.11 W., Kenai Peninsula Borough, Hydrologic Unit 19050002, on left bank 2.1 mi downstream from Lone Creek, 4.8 mi northwest of Tyonek, and 6.1 mi upstream from mouth.

DRAINAGE AREA.--131 mi².

PERIOD OF RECORD.--October 1975 to September 1986 (discontinued).

REVISED RECORDS.--WDR AK-82-1: 1976 (M), 1977, 1979 (M), 1980, and 1981 (M).

GAGE.--Water-stage recorder. Elevation of gage is 160 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 11 to Apr. 30. Records fair except for period of no gage-height record, Oct. 11 to Dec. 3, and period with ice effect, Dec. 4 to Apr. 30, which are poor.

AVERAGE DISCHARGE.--11 years, 359 ft³/s, 37.21 in/yr, 260,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,800 ft³/s, Sept. 15, 1982, gage height, 10.07 ft , from rating curve extended above 2,700 ft³/s on basis of slope-area measurement of peak flow; maximum gage height, 10.97 ft, May 14, 1976, backwater from ice; minimum daily discharge, about 30 ft³/s, Dec. 9, 1979.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Oct. 10, 1986 had a recorded gage height of 16.46 ft; discharge not determined but probably exceeded 10,000 ft³/s.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 2,200 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
May 26	0030	2,300	7.20	Sept.20	0800	3,160	8.01
Sept. 8	0400	*3,390	*8.26				

Minimum discharge recorded, 81 ft³/s, July 20 and 22, but may have been less during period of ice effect, Feb. 15 to Mar. 10.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	945	290	150	140	110	90	110	881	1230	155	106	706
2	706	280	150	140	110	90	120	851	1010	148	98	440
3	581	270	145	140	110	90	140	691	1010	134	97	339
4	500	260	145	140	110	90	150	695	991	125	100	282
5	437	250	140	140	110	90	140	709	919	116	111	249
6	423	240	130	130	110	95	130	842	875	109	119	221
7	583	230	130	130	110	95	120	829	895	117	103	527
8	1580	220	130	130	110	95	140	903	771	109	435	2180
9	1640	210	120	130	110	95	150	808	670	105	574	734
10	928	200	120	130	110	95	160	737	718	101	429	433
11	500	190	120	130	100	100	170	764	667	98	300	340
12	390	190	120	130	100	100	170	832	581	93	506	297
13	360	190	120	130	100	100	180	891	614	95	406	267
14	720	190	120	130	100	110	180	912	605	91	220	241
15	800	190	110	130	100	110	190	881	598	89	278	222
16	700	180	110	130	100	110	200	889	534	95	263	301
17	540	180	110	130	100	110	220	1040	449	105	174	516
18	500	180	110	130	100	110	280	1170	394	89	154	508
19	498	180	110	120	100	110	320	1280	364	84	170	375
20	460	180	110	120	100	110	360	1320	322	82	144	2170
21	450	170	120	120	95	110	360	1280	236	87	136	803
22	430	170	120	120	95	110	340	1390	222	87	130	580
23	420	170	130	120	95	110	320	1430	223	694	144	602
24	400	170	150	120	95	110	280	1550	208	261	560	395
25	380	160	190	120	95	110	320	1840	186	150	900	327
26	370	160	160	120	95	110	360	1830	173	309	1350	288
27	360	160	160	120	95	110	400	1680	165	160	1720	307
28	350	160	160	120	95	110	480	1530	161	122	1360	357
29	330	160	150	120	---	110	600	1570	151	108	639	389
30	320	150	150	120	---	100	740	1450	148	101	565	398
31	310	---	150	120	---	100	---	1380	---	103	817	---
TOTAL	17911	5930	4140	3950	2860	3185	7830	34855	16090	4322	13108	15794
MEAN	578	198	134	127	102	103	261	1124	536	139	423	526
MAX	1640	290	190	140	110	110	740	1840	1230	694	1720	2180
MIN	310	150	110	120	95	90	110	691	148	82	97	221
CFSM	4.41	1.51	1.02	.97	.78	.79	1.99	8.58	4.09	1.06	3.23	4.02
IN.	5.09	1.58	1.18	1.12	.81	.90	2.22	9.90	4.57	1.23	3.72	4.48
AC-FT	35530	11760	8210	7830	5670	6320	15530	69130	31910	8570	26000	31330

CAL YR 1985 TOTAL 140958 MEAN 386 MAX 2950 MIN 60 CFSM 2.95 IN 40.03 AC-FT 279600
WTR YR 1986 TOTAL 129975 MEAN 356 MAX 2180 MIN 82 CFSM 2.72 IN 36.91 AC-FT 257800

15295600 TERROR RIVER NEAR KODIAK

LOCATION.--Lat 57°39'05", long 153°01'46", in SW¼NE¼ sec.19, T.29 S., R.23 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, in Kodiak National Wildlife Refuge, on right bank 1,200 ft downstream from Terror Lake Dam, 8 mi upstream from mouth at Terror Bay, and 25 mi southwest of Kodiak.

DRAINAGE AREA.--15.0 mi².

PERIOD OF RECORD.--June 1962 to September 1968, July 1978 to September 1986 (discontinued).

REVISED RECORD.--WDR AK-81-1: 1962 (M), 1963, 1964 (M), 1965 (M), 1966 (P), 1967 (M), 1968 (M), 1978 (M), 1979 (M), 1980 (P).

GAGE.--Water-stage recorder. Elevation of gage is 1,180 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 26, 1982, at site 1,200 ft upstream at different datum.

REMARKS.--No estimated daily discharges. Records good. Flow completely regulated by Terror Lake Dam. Water diverted from Terror Lake for hydropower plant and then into Kizhuyak River, since Feb. 12, 1985. Occasional regulation for construction began in November 1982, began filling reservoir Apr. 29, 1984. Unpublished records of stage, Oct. 1 to Dec. 2, 1986, are available in files of Anchorage Subdistrict office.

AVERAGE DISCHARGE.--11 years (water years 1963-68, 1979-83), 142 ft³/s, 128.55 in/yr, 102,900 acre-ft/yr, prior to filling of Terror Lake reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,400 ft³/s, Oct. 21, 1980, gage height, 7.87 ft, site and datum then in use, from rating curve extended above 770 ft³/s on basis of slope-area measurement of peak flow; minimum daily, about 8.0 ft³/s, Mar. 13-24, 1966, prior to regulation. After regulation began, maximum discharge, 508 ft³/s, Nov. 10, 1983, gage height, 3.17 ft; minimum daily, 0.35 ft³/s, June 11-13, 1984, during filling of reservoir.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 152 ft³/s, Sept. 27, gage height, 2.48 ft; minimum daily, 3.8 ft³/s, June 10-11 and July 1-2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	120	112	35	38	38	38	40	125	18	3.8	4.4	128
2	120	112	35	38	38	40	41	131	18	3.8	4.4	128
3	120	112	36	38	38	40	41	131	18	3.9	4.4	128
4	120	110	36	38	38	40	41	131	18	4.0	4.4	131
5	120	107	37	38	38	41	41	131	18	4.0	4.4	140
6	117	110	37	38	38	41	40	131	18	4.0	4.4	137
7	117	98	37	40	38	41	40	131	18	4.0	4.4	137
8	120	89	38	40	38	41	74	131	18	4.0	4.4	137
9	117	89	38	40	40	41	117	131	7.2	4.0	4.4	134
10	117	89	38	40	41	41	117	131	3.8	4.0	4.4	134
11	117	87	40	40	41	41	117	131	3.8	4.1	4.4	134
12	115	87	38	40	41	41	120	131	4.4	4.1	4.4	131
13	117	87	38	40	41	41	120	131	4.0	4.1	4.4	134
14	117	87	38	40	40	41	122	131	3.9	4.1	4.4	131
15	117	89	37	40	40	41	123	131	4.0	4.1	4.2	128
16	117	89	37	40	40	41	120	134	4.0	4.1	4.2	131
17	115	89	37	40	40	41	120	134	3.9	4.1	4.2	131
18	115	44	37	40	40	41	120	134	4.0	4.2	4.2	128
19	115	20	37	40	38	41	120	134	3.9	4.2	87	128
20	115	20	37	40	38	41	120	134	3.9	4.3	137	128
21	115	20	37	40	38	41	120	66	3.9	4.2	137	128
22	115	20	37	40	38	41	117	17	3.9	4.2	134	128
23	112	28	38	40	38	41	117	17	3.9	4.2	131	128
24	115	37	38	40	38	40	117	17	3.9	4.2	128	125
25	112	37	38	40	38	40	117	17	3.9	4.1	128	123
26	112	37	40	40	38	40	117	17	3.9	4.1	128	125
27	112	37	40	40	38	40	117	17	3.9	4.1	128	140
28	115	37	40	38	38	40	117	17	3.9	4.2	131	140
29	115	36	40	38	---	40	117	17	3.9	4.4	131	137
30	112	36	40	38	---	40	117	17	3.9	4.4	134	135
31	112	---	38	38	---	40	---	17	---	4.4	134	---
TOTAL	3595	2052	1169	1220	1088	1257	2967	2865	233.8	127.4	1746.4	3947
MEAN	116	68.4	37.7	39.4	38.9	40.5	98.9	92.4	7.79	4.11	56.3	132
MAX	120	112	40	40	41	41	123	134	18	4.4	137	140
MIN	112	20	35	38	38	38	40	17	3.8	3.8	4.2	123
AC-FT	7130	4070	2320	2420	2160	2490	5890	5680	464	253	3460	7830

CAL YR 1985 TOTAL 19094.54 MEAN 52.3 MAX 125 MIN .53 AC-FT 37870
WTR YR 1986 TOTAL 22267.60 MEAN 61.0 MAX 140 MIN 3.8 AC-FT 44170

15295700 TERROR RIVER AT MOUTH NEAR KODIAK

LOCATION.--Lat. 57°41'49", long 153°09'20", in SW¼NE¼ sec.5, T.29 S., R.24 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, in Kodiak National Wildlife Refuge, on right bank, 0.9 mi upstream from mouth, 7.5 mi downstream from Terror Lake Dam, and 29 mi southwest of Kodiak.

DRAINAGE AREA.--45.7 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--February 1964 to October 1968, October 1981 to current year.

REVISED RECORDS.--WRD AK-84-1: 1982-83.

GAGE.--Water-stage recorder. Elevation of gage is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1981 at site 0.2 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Feb. 26 to Mar. 7. Records good except for period with ice effect, Feb. 26 to Mar. 7, which is poor. Flow from 15 mi^2 at headwaters regulated by Terror Lake Dam and some flow diverted from Terror Lake to Kizuhuyak River. Regulation for construction began in November 1982. Began filling reservoir Apr. 29, 1984. Diversion to hydropower plant began Feb. 12, 1985. GOES satellite telemeter at station.

AVERAGE DISCHARGE.--6 years (water years 1965-68, 1982-83), 293 ft^3/s, 87.07 in/yr, 212,300 acre-ft/yr, prior to regulation and filling of Terror Lake reservoir.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 3,820 ft^3/s, Sept. 26, 1966, gage height, 6.48 ft, site and datum then in use; maximum gage height, 7.54 ft, Mar. 28, 1964 (tidal wave), site and datum then in use; minimum daily discharge, 19 ft^3/s, Feb. 23 and Mar. 1, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,640 ft^3/s, Aug. 25, gage height, 3.49 ft, from rating curve extended above 960 ft^3/s on basis of slope-area measurement at gage height, 4.80 ft; minimum daily, 31 ft^3/s, Nov. 23.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	659	139	328	126	114	50	55	177	490	567	290	401
2	459	139	254	116	129	50	60	204	473	532	518	278
3	369	139	154	129	107	50	58	194	760	514	948	230
4	321	139	114	124	107	50	56	190	1040	425	676	211
5	294	137	89	114	107	52	55	197	698	435	339	208
6	321	139	85	93	280	52	49	197	552	513	242	208
7	389	126	77	98	334	52	47	211	652	394	253	230
8	399	100	385	91	198	56	53	233	735	317	565	230
9	398	109	650	114	177	55	128	215	528	316	463	197
10	368	156	1010	100	381	56	129	276	436	307	446	194
11	300	134	1290	98	403	61	129	226	430	362	359	187
12	282	116	522	170	266	68	129	208	1070	383	270	184
13	269	107	327	333	198	66	134	233	724	331	209	184
14	246	100	286	227	162	77	139	230	607	299	187	180
15	245	104	245	169	137	70	142	226	686	387	201	208
16	233	104	265	137	124	68	139	222	847	383	197	226
17	218	104	212	124	114	68	137	222	744	430	165	211
18	201	100	249	121	102	66	139	226	540	829	187	190
19	190	53	290	114	102	65	137	233	458	841	233	180
20	190	37	234	100	95	61	137	249	513	903	197	201
21	190	34	338	98	89	60	134	253	612	834	187	187
22	177	33	344	107	87	61	131	188	509	887	187	174
23	174	31	274	102	81	63	129	184	431	1020	222	168
24	171	38	216	98	73	75	137	215	393	739	222	168
25	162	49	190	93	68	77	137	272	354	570	302	162
26	156	79	237	75	60	70	137	348	358	652	1380	156
27	150	65	261	91	54	63	137	383	393	601	885	156
28	150	55	222	89	49	60	142	414	419	480	553	156
29	150	70	204	98	---	55	145	451	446	431	447	156
30	145	95	184	176	---	55	156	462	495	374	924	156
31	142	---	156	130	---	55	---	462	---	304	662	---
TOTAL	8118	2831	9692	3855	4198	1887	3437	7951	17393	16360	12916	5977
MEAN	262	94.4	313	124	150	60.9	115	256	580	528	417	199
MAX	659	156	1290	333	403	77	156	462	1070	1020	1380	401
MIN	142	31	77	75	49	50	47	177	354	299	165	156
AC-FT	16100	5620	19220	7650	8330	3740	6820	15770	34500	32450	25620	11860

CAL YR 1985 TOTAL 87425 MEAN 240 MAX 2120 MIN 31 AC-FT 173400
WTR YR 1986 TOTAL 94615 MEAN 259 MAX 1380 MIN 31 AC-FT 187700

15295700 TERROR RIVER AT MOUTH NEAR KODIAK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1968, 1981 to current year.

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: December 1981 to current year.

INSTRUMENTATION.--Water-temperature recorder since Dec. 10, 1981. Electronic water temperature recorder set for one-hour recording interval. Prior to Jan. 27, 1986, digital water-temperature recorder set for one-hour recording interval.

REMARKS.--No record Jan. 27 to Feb. 5 and Feb. 16 to Mar. 17. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross sections on Nov. 5, Jan. 6, Mar. 17, Apr. 23 and July 28. A maximum variation of 0.3°C was found within the cross sections. A maximum variation between mean stream temperature and temperature at the probe was 0.2°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 13.0°C, Aug. 13, 14, 1982; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 10.5°C, July 28, 29; minimum, 0.0°C, on many days during the winter period.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.0	6.5	1.5	1.0	2.5	2.0	.0	.0	---	---	---	---
2	7.0	5.0	1.5	.5	2.0	1.5	.0	.0	---	---	---	---
3	6.0	5.0	1.5	.5	2.5	1.5	.5	.0	---	---	---	---
4	7.0	5.0	2.5	.5	1.5	.5	1.0	.0	---	---	---	---
5	6.5	4.5	3.5	2.5	.5	.0	1.0	.0	---	---	---	---
6	7.0	6.5	4.5	3.0	.5	.0	.0	.0	2.0	1.0	---	---
7	7.5	6.0	4.0	1.5	1.5	.0	.0	.0	2.0	1.0	---	---
8	7.5	6.5	3.0	1.0	2.5	1.0	.5	.0	2.5	1.0	---	---
9	6.5	6.0	4.0	3.0	2.5	2.0	.5	.0	3.0	1.5	---	---
10	5.5	4.5	4.0	3.0	3.0	2.0	.5	.5	2.5	2.0	---	---
11	5.0	3.5	3.0	2.5	2.5	1.5	1.0	.5	3.0	1.5	---	---
12	6.0	4.5	2.5	1.5	1.5	1.0	2.0	.5	2.0	1.0	---	---
13	6.5	4.5	1.5	1.0	3.0	1.5	1.5	1.0	2.0	.5	---	---
14	5.5	4.0	2.5	1.0	2.5	2.5	1.5	1.0	1.0	.5	---	---
15	6.0	5.0	3.5	2.5	2.0	1.5	1.0	.5	1.0	.0	---	---
16	5.5	4.5	3.5	2.5	1.5	1.0	1.0	.0	---	---	---	---
17	5.5	4.0	2.5	1.5	1.5	1.0	1.5	.5	---	---	---	---
18	4.0	3.0	1.5	1.0	2.0	1.5	1.0	.0	---	---	3.0	1.0
19	4.0	2.5	2.0	1.0	2.0	1.0	1.5	.5	---	---	1.5	.0
20	4.5	3.5	2.0	1.5	2.5	1.0	1.0	.5	---	---	2.5	.5
21	5.0	4.0	2.5	2.0	2.5	1.5	1.0	.5	---	---	3.0	.5
22	4.0	3.0	2.5	1.5	2.5	2.0	1.5	1.0	---	---	2.5	1.0
23	3.0	2.0	1.5	.5	2.0	1.0	2.0	1.5	---	---	2.5	1.0
24	3.0	2.0	1.0	.5	1.0	.5	2.0	1.5	---	---	2.5	1.0
25	2.5	1.0	1.5	.5	2.0	.5	1.5	1.0	---	---	3.5	1.0
26	2.0	1.0	3.0	1.5	3.0	2.0	1.0	.0	---	---	2.0	.0
27	2.5	1.0	2.5	2.0	3.0	1.0	---	---	---	---	2.0	.0
28	3.0	2.5	3.0	1.5	2.5	1.0	---	---	---	---	2.0	.0
29	2.5	1.0	3.0	2.0	2.0	1.0	---	---	---	---	.5	.0
30	2.0	1.0	3.0	2.5	1.5	1.0	---	---	---	---	1.0	.0
31	2.5	1.0	---	---	1.0	.0	---	---	---	---	1.5	.0
MONTH	7.5	1.0	4.5	.5	3.0	.0	2.0	.0				

15295700 TERROR RIVER AT MOUTH NEAR KODIAK--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.0	.0	7.0	1.5	7.5	2.5	5.5	4.0	9.5	7.0	8.5	7.5
2	1.0	.0	3.5	1.0	5.0	2.5	6.5	4.0	10.0	7.5	9.0	7.0
3	4.0	.5	4.5	2.0	4.5	2.5	7.5	3.0	9.0	7.0	8.5	6.5
4	3.0	.5	6.0	1.5	5.0	2.5	7.5	3.5	8.0	7.0	8.0	7.0
5	2.5	.0	5.5	1.0	6.5	2.5	5.5	4.0	8.5	6.5	8.5	7.0
6	1.0	.0	5.0	2.0	4.0	2.5	6.0	4.0	9.0	7.0	8.0	7.0
7	.5	.0	5.0	2.0	4.5	3.0	5.5	3.5	7.5	6.5	9.0	7.0
8	1.0	.0	4.5	2.0	5.5	3.0	6.0	4.0	9.0	7.5	8.5	6.5
9	.5	.0	4.5	2.0	6.5	2.5	6.0	4.0	8.0	7.0	8.5	6.0
10	2.5	.0	6.0	2.0	7.0	3.0	9.0	3.5	9.0	7.0	9.0	5.5
11	4.0	.5	4.0	1.5	4.5	3.0	9.0	4.0	9.0	6.0	8.5	6.0
12	3.5	1.5	7.5	1.0	4.5	3.0	9.0	3.0	9.0	6.5	8.0	6.0
13	4.5	1.5	6.0	1.5	5.5	3.0	7.5	4.0	9.5	6.5	9.0	7.0
14	3.5	1.5	5.0	2.0	5.0	3.5	9.0	3.0	8.5	6.5	9.0	6.5
15	5.5	1.0	5.5	2.0	8.5	3.0	6.5	4.5	9.5	7.0	10.0	8.0
16	3.0	1.5	5.5	2.0	7.5	3.5	8.5	4.5	10.0	5.5	9.5	8.0
17	4.5	1.0	6.0	1.5	5.0	3.0	9.0	4.0	10.0	6.0	9.0	8.0
18	4.0	1.0	5.5	2.0	4.5	3.5	7.5	4.5	9.0	7.5	8.5	7.0
19	4.5	1.5	7.0	2.0	5.5	3.5	9.0	5.0	9.0	6.5	9.5	7.0
20	4.5	.5	7.0	1.5	6.5	3.5	9.5	5.5	9.5	6.0	9.5	7.5
21	3.5	.0	7.5	1.5	5.5	3.5	8.0	5.5	9.5	5.5	9.0	7.0
22	3.5	.0	5.5	2.0	5.5	3.5	8.0	6.5	9.5	6.0	8.0	6.5
23	4.0	.0	5.5	3.0	7.0	3.5	7.5	5.5	8.5	7.0	7.0	5.5
24	4.5	.0	9.0	1.5	5.5	3.5	8.5	5.0	8.5	7.0	7.5	5.5
25	4.0	.5	7.5	2.0	6.5	3.0	7.5	5.5	7.5	6.5	6.5	4.5
26	4.0	1.0	7.0	2.5	7.5	3.5	9.0	5.5	9.5	8.0	7.0	6.0
27	5.5	.5	7.0	2.0	6.5	3.0	9.5	5.0	10.0	8.5	7.5	6.5
28	6.0	.5	8.0	2.0	5.5	3.5	10.5	5.5	9.5	8.5	8.5	7.0
29	6.5	1.0	7.5	2.0	5.5	3.5	10.5	6.0	8.5	8.0	8.0	6.5
30	6.5	1.0	5.0	3.0	5.5	3.5	9.0	6.0	9.0	8.0	7.5	6.5
31	---	---	6.5	2.5	---	---	9.5	7.0	9.5	8.0	---	---
MONTH	6.5	.0	9.0	1.0	8.5	2.5	10.5	3.0	10.0	5.5	10.0	4.5
YEAR	10.5	.0										

15297200 MYRTLE CREEK NEAR KODIAK

LOCATION.--Lat 57°36'12", long 152°24'12", in NE¼SW¼ sec.6, T.30 S., R.19 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on left bank 0.1 mi upstream from bridge, 0.3 mi upstream from mouth, and 13 mi south of Kodiak.

DRAINAGE AREA.--4.74 mi².

PERIOD OF RECORD.--May 1963 to September 1986 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 4, 1977 at site 200 ft downstream on right bank at same datum.

REMARKS.--Estimated daily discharges: Oct. 24 to Nov. 9, Nov. 13-15, Dec. 5-7, Jan. 1-6, Feb. 18, 20-28, Mar. 2-10, 29-31, and Apr. 6-9. Records good except for periods with ice effect, Oct. 24, Nov. 13-15, Jan. 4-6, Feb. 18, 20-28, Mar. 29-31, and Apr. 6-9, and periods of no gage-height record, Oct. 25 to Nov. 9, Dec. 5-7, Jan. 1-3, and Mar. 2-10, which are poor. Several observations of water temperature were made during the year.

AVERAGE DISCHARGE.--23 years, 45.9 ft³/s, 131.50 in/yr, 33,250 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,350 ft³/s, Jan. 3, 1977, gage height, 5.61 ft at site then in use, 6.93 ft from floodmarks at present site, from rating curve extended above 400 ft³/s on the basis of slope-area measurement of peak flow; maximum gage height, 8.40 ft, Mar. 28, 1964, at site then in use, tidal wave caused by earthquake; minimum daily discharge, about 1.0 ft³/s, Mar. 3-18, 1972.

EXTREMES FOR CURRENT YEAR.--Peak discharges above base of 550 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
Dec. 9	0200	829	5.63	June 4	0200	739	5.38
Dec. 10	2300	*865	*5.73	June 12	0930	708	5.29

Minimum daily discharge, about 4.5 ft³/s, Nov. 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	66	6.5	205	32	50	6.5	13	14	50	50	7.5	58
2	47	6.0	103	30	57	6.0	17	17	75	44	9.7	42
3	44	5.5	60	28	39	5.5	17	24	336	37	46	33
4	35	5.0	38	26	34	5.0	16	24	345	31	28	28
5	29	4.5	29	24	41	5.5	14	24	88	34	21	23
6	80	6.0	22	22	266	6.0	12	36	67	36	18	21
7	78	6.5	19	19	130	6.5	11	50	136	33	36	48
8	74	6.5	248	22	60	7.0	11	44	145	29	157	41
9	48	8.0	398	23	118	9.0	11	38	104	27	62	32
10	34	259	449	22	237	17	11	34	63	24	61	26
11	28	82	434	21	109	48	9.7	37	64	21	42	21
12	29	43	99	113	55	119	9.7	32	327	19	32	19
13	30	30	85	151	38	68	10	33	111	17	26	17
14	25	24	131	73	29	60	12	32	172	16	22	16
15	26	18	98	44	24	46	12	33	91	19	19	14
16	24	16	122	34	21	43	12	33	64	18	18	13
17	20	14	73	26	17	39	12	34	52	16	16	12
18	18	13	225	25	16	33	12	34	48	15	16	11
19	16	12	149	23	14	26	12	34	39	14	14	11
20	14	11	101	18	12	21	12	34	72	13	13	13
21	13	11	132	21	11	17	12	34	100	12	13	11
22	12	11	176	40	11	17	12	35	63	15	12	11
23	11	11	101	46	10	19	12	37	45	14	12	10
24	10	8.9	57	31	9.0	36	11	42	38	12	11	9.7
25	9.7	9.3	56	28	8.5	36	11	44	34	11	18	9.3
26	9.5	129	134	22	8.0	34	10	45	29	11	136	14
27	9.0	64	127	21	7.5	29	10	47	30	9.3	81	16
28	8.5	43	78	21	7.0	24	11	48	41	8.9	62	14
29	8.0	52	70	67	---	18	11	48	39	8.2	62	13
30	7.5	55	52	210	---	14	12	47	47	7.9	261	13
31	7.0	---	38	67	---	13	---	49	---	7.5	90	---
TOTAL	870.2	970.7	4109	1350	1439.0	834.0	358.4	1117	2915	629.8	1422.2	620.0
MEAN	28.1	32.4	133	43.5	51.4	26.9	11.9	36.0	97.2	20.3	45.9	20.7
MAX	80	259	449	210	266	119	17	50	345	50	261	58
MIN	7.0	4.5	19	18	7.0	5.0	9.7	14	29	7.5	7.5	9.3
CFSM	5.93	6.84	28.1	9.18	10.8	5.68	2.51	7.60	20.5	4.28	9.68	4.37
IN.	6.83	7.62	32.24	10.59	11.29	6.54	2.81	8.76	22.87	4.94	11.16	4.86
AC-FT	1730	1930	8150	2680	2850	1650	711	2220	5780	1250	2820	1230

CAL YR 1985 TOTAL 17564.8 MEAN 48.1 MAX 457 MIN 3.8 CFSM 10.1 IN 137.82 AC-FT 34840

WTR YR 1986 TOTAL 16635.3 MEAN 45.6 MAX 449 MIN 4.5 CFSM 9.62 IN 130.53 AC-FT 33000

15297485 KIZHUYAK RIVER NEAR PORT LIONS

LOCATION.--Lat 57°42'38", long 152°52'06", in NE¼NE¼ sec.32, T.28 S., R.22 W., Kodiak Island Borough, Hydrologic Unit 19050001, on Kodiak Island, on right bank 1.3 mi upstream from mouth at Kizhuyak Bay and 10.8 mi south of Port Lions.

DRAINAGE AREA.--47.5 mi^2, includes 15.0 mi^2 of Terror Lake basin. Prior to February 1985, 27.5 mi^2.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--April 1980 to current year. Records prior to February 1985 are not equivalent because water was not diverted into the river from Terror Lake basin.

GAGE.--Water-stage recorder. Elevation of gage is 15 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1 to Nov. 4 and Dec. 17 to Jan. 6. Records fair except for estimated daily discharges, which are poor. Diversion of water from Terror Lake through Kizhuyak Power House (upstream from gage), began Feb. 12, 1985. Three small Kizhuyak River tributaries, Falls (4.5 mi^2), Shotgun (1.9 mi^2), and Rolling Rock (1.6 mi^2) Creeks are partially diverted into the power plant penstock; during high inflows this water can go into storage in Terror Lake and during lesser flows the water goes through the power plant. Excess water is spilled at Terror Lake into Terror River and at the 3 diversion dams the excess flows spills into Kizhuyak River upstream from the gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,430 ft^3/s, Sept. 26, 1980, gage height, 10.65 ft, from rating curve extended above 700 ft^3/s on basis of slope-area measurement at gage height, 10.60 ft; minimum daily, about 1.0 ft^3/s, Feb. 27 to Mar. 4 and Mar. 11-16, 1982. Maximum discharge since diversion of flow from Terror Lake basin began in February 1985, 2,200 ft^3/s, Aug. 26, 1986, gage height, 9.21 ft; minimum daily, 32 ft^3/s, Feb. 16, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,200 ft^3/s, Aug. 26, gage height, 9.21 ft, from rating curve extended above 480 ft^3/s on basis of slope-area measurement at gage height, 10.60 ft; minimum recorded, 53 ft^3/s, Apr. 23, but may have been less during period of no gage-height record, Dec. 17 to Jan. 6.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	600	90	151	80	146	111	99	103	297	724	235	294
2	500	85	158	90	146	105	103	105	347	669	321	256
3	300	85	121	145	146	111	82	111	834	640	648	225
4	280	85	101	125	146	109	87	111	801	564	408	209
5	260	87	85	100	143	95	87	117	496	521	315	199
6	280	92	77	115	227	92	87	125	440	575	286	185
7	300	95	72	127	313	83	92	123	594	499	298	228
8	320	92	116	132	213	95	90	108	640	445	549	242
9	320	94	275	134	185	95	88	125	481	408	401	195
10	300	97	469	130	316	101	92	124	404	418	423	164
11	260	101	718	134	313	111	92	123	399	492	357	162
12	220	103	237	153	249	94	87	123	863	515	314	161
13	200	105	172	185	178	107	87	125	629	461	272	153
14	190	107	156	188	164	113	88	127	588	404	260	148
15	170	107	148	161	156	107	92	130	653	569	260	194
16	160	107	136	146	146	109	94	132	807	477	256	228
17	150	105	125	141	143	111	92	130	690	390	242	200
18	140	105	190	136	125	105	90	127	552	497	249	186
19	130	105	160	130	127	105	88	134	482	487	267	174
20	120	103	180	130	130	105	87	139	568	626	242	191
21	110	99	240	136	127	103	90	143	690	534	232	180
22	110	97	270	134	123	101	90	154	589	714	234	172
23	100	97	180	130	119	97	77	156	499	784	260	143
24	100	97	120	136	121	103	94	156	419	453	278	119
25	95	97	95	127	121	103	99	183	408	367	318	143
26	95	97	140	121	117	101	99	212	379	453	902	153
27	95	97	135	121	121	101	99	242	413	380	398	148
28	90	97	105	125	117	101	99	263	475	298	319	141
29	90	99	110	125	---	99	97	274	498	297	309	153
30	90	107	120	146	---	94	99	282	606	261	1030	153
31	90	---	100	146	---	97	---	290	---	235	395	---
TOTAL	6265	2934	5462	4129	4678	3164	2747	4797	16541	15157	11278	5499
MEAN	202	97.8	176	133	167	102	91.6	155	551	489	364	183
MAX	600	107	718	188	316	113	103	290	863	784	1030	294
MIN	90	85	72	80	117	83	77	103	297	235	232	119
AC-FT	12430	5820	10830	8190	9280	6280	5450	9510	32810	30060	22370	10910

CAL YR 1985 TOTAL 71669 MEAN 196 MAX 2000 MIN 32 AC-FT 142200
WTR YR 1986 TOTAL 82651 MEAN 226 MAX 1030 MIN 72 AC-FT 163900

15297485 KIZHUYAK RIVER NEAR PORT LIONS--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: April 1980 to August 1983 (fragmentary), December 1983 to October 1984, and December 1984 to September 1985 (fragmentary), and November 1985 to September 1986 (fragmentary).

INSTRUMENTATION.--Electronic water temperature recorder set for one-hour recording interval. Prior to January 27, 1986, a digital water temperature recorder was used.

REMARKS.--No record Oct. 1 to Nov. 5 when recorder malfunctioned and March 17 and July 14 to Sept. 8, when probe cable was cut. Records represent water temperature at sensor within 0.5°C. Temperature at the sensor was compared with the average for the river by temperature cross sections on Nov. 5, Jan. 6, Apr. 23 and July 28. A maximum variation of 0.2°C was found within the cross sections. A maxmimum variation between mean stream temperature and temperature at the probe was 0.0°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum recorded, 10.5°C, on several days during 1980, 1982, and 1984; minimum 0.0°C, Apr. 6, 7, 1986.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum recorded, 7.0°C, July 10-12 and Sept. 15-20, but may have been higher during period of no record, July 14 to Sept. 8; minimum, 0.0°C, Apr. 6, 7.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1			---	---	3.5	3.5	2.0	1.5	2.0	1.0	2.0	.5
2			---	---	3.5	3.5	2.0	1.5	2.0	1.5	2.5	.5
3			---	---	4.0	3.5	2.0	1.0	2.5	1.5	2.5	1.0
4			---	---	3.5	3.5	2.0	2.0	2.5	2.0	2.5	.5
5			---	---	4.0	3.5	2.0	1.5	2.5	2.0	2.0	1.0
6			4.5	4.5	4.0	3.5	2.0	1.5	2.0	1.5	2.0	1.0
7			4.5	4.5	4.0	3.5	2.0	1.5	2.5	1.5	3.0	1.0
8			4.5	4.0	4.0	3.5	2.5	1.5	2.5	1.5	3.0	1.0
9			4.5	4.5	3.5	3.0	2.5	2.0	2.5	2.0	2.5	1.0
10			4.5	4.5	3.5	1.5	2.5	2.0	2.0	2.0	2.5	1.0
11			4.5	4.0	2.5	2.0	2.5	2.0	2.5	1.5	2.5	1.0
12			4.0	4.0	3.0	2.5	3.0	2.5	2.5	1.5	2.5	1.0
13			4.0	4.0	3.0	3.0	3.0	2.5	2.5	1.5	2.5	1.5
14			4.0	4.0	3.0	3.0	3.0	2.5	2.5	1.0	3.0	1.5
15			4.0	4.0	3.0	3.0	3.0	2.0	2.5	1.5	3.0	1.5
16			4.0	4.0	3.0	2.5	2.0	2.0	2.5	1.5	2.5	1.5
17			4.0	4.0	3.0	2.5	2.0	2.0	2.5	1.5	---	---
18			4.0	4.0	3.0	2.5	2.0	1.0	2.0	1.0	3.0	1.5
19			4.0	4.0	3.0	2.5	1.0	1.0	2.0	1.0	2.5	1.0
20			4.0	4.0	2.5	2.5	1.0	1.0	2.5	1.0	3.5	1.5
21			4.0	4.0	2.5	2.0	1.5	1.5	2.0	1.5	3.5	1.5
22			4.0	4.0	2.5	2.5	1.5	1.5	2.0	1.5	2.5	1.5
23			4.0	3.5	2.5	2.0	1.5	1.5	2.5	1.0	2.5	1.5
24			3.5	3.5	2.5	2.0	1.5	1.5	1.5	1.5	3.0	1.5
25			4.0	3.5	2.5	2.0	2.0	2.0	2.0	.5	3.0	1.5
26			4.0	4.0	3.0	2.5	2.0	2.0	1.5	.5	3.0	1.0
27			4.0	4.0	2.5	2.0	2.0	2.0	1.5	.5	3.5	1.0
28			4.0	3.5	2.5	2.0	2.5	2.0	2.0	.5	3.5	.5
29			4.0	4.0	2.5	2.0	2.5	2.0	---	---	2.5	.5
30			4.0	3.5	2.5	2.0	2.5	2.0	---	---	3.5	.5
31			---	---	2.0	1.5	2.5	1.5	---	---	3.5	.5
MONTH			4.5	3.5	4.0	1.5	3.0	1.0	2.5	.5	3.5	.5

15297485 KIZHUYAK RIVER NEAR PORT LIONS--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	2.0	1.0	5.5	1.5	5.5	2.5	4.5	3.5			---	---
2	2.0	1.0	3.0	1.5	3.5	2.5	5.0	3.5			---	---
3	4.0	1.0	4.0	2.0	4.5	2.0	6.0	3.5			---	---
4	3.5	1.0	4.5	1.5	4.0	2.5	5.5	3.5			---	---
5	2.5	.5	4.0	1.0	5.0	2.5	4.5	3.5			---	---
6	2.5	.0	3.0	2.0	3.0	2.5	5.0	3.5			---	---
7	2.0	.0	3.5	2.0	3.5	3.0	5.5	3.5			---	---
8	3.5	.5	4.0	1.5	3.5	2.5	4.0	3.5			---	---
9	3.5	.5	4.0	2.0	4.0	3.0	4.5	3.5			6.0	5.5
10	3.0	1.5	5.0	1.5	4.0	3.0	7.0	3.5			6.0	5.5
11	4.0	1.0	4.0	1.5	3.5	3.0	7.0	3.5			6.0	5.5
12	3.5	1.5	5.0	1.5	3.5	3.0	7.0	3.5			6.0	5.5
13	4.5	1.5	5.0	1.5	3.5	3.0	6.0	4.0			6.5	5.5
14	3.5	1.5	3.5	2.0	3.5	3.0	---	---			6.5	5.5
15	4.0	1.0	3.5	1.5	6.5	3.0	---	---			7.0	6.0
16	2.5	1.0	5.0	1.5	6.0	3.0	---	---			7.0	6.5
17	4.0	1.0	4.5	1.5	4.0	3.0	---	---			7.0	6.5
18	3.0	1.0	3.5	2.0	3.5	3.0	---	---			7.0	6.5
19	4.0	1.5	5.0	1.5	4.0	3.0	---	---			7.0	6.0
20	4.5	1.0	5.5	1.5	4.0	3.0	---	---			7.0	6.5
21	4.0	1.0	5.5	1.5	4.5	3.0	---	---			6.5	6.0
22	4.5	1.0	3.0	1.5	4.5	3.0	---	---			6.5	6.0
23	4.5	1.0	3.5	2.0	4.5	3.0	---	---			6.0	5.5
24	4.5	1.0	5.5	1.5	4.0	3.0	---	---			6.0	5.5
25	3.5	1.0	5.0	2.0	4.5	3.0	---	---			6.0	5.5
26	4.5	1.5	5.0	2.5	6.5	3.0	---	---			5.5	5.5
27	4.5	1.0	5.0	2.0	4.5	3.0	---	---			6.0	5.5
28	5.0	1.0	5.5	2.0	4.5	3.0	---	---			6.0	5.5
29	5.0	1.0	5.5	2.0	4.5	3.0	---	---			6.0	5.5
30	5.0	1.0	4.0	2.5	5.0	3.5	---	---			6.0	5.5
31	---	---	4.5	2.5	---	---	---	---			---	---
MONTH	5.0	.0	5.5	1.0	6.5	2.0						5.5
YEAR	7.0	.0										

15297610 RUSSELL CREEK NEAR COLD BAY

LOCATION.--Lat 55°10'50", long 162°41'08", Hydrologic Unit 19040003, on left bank 0.2 mi southeast of Russell Creek Fish Hatchery, 1.5 mi upstream from mouth, and 2.5 mi southeast of Cold Bay.

DRAINAGE AREA.--25 mi², approximately.

PERIOD OF RECORD.--October 1981 to December 1986 (discontinued).

GAGE.--Water-stage recorder and crest-stage gage. Datum of gage is 3.55 ft above National Geodetic Vertical Datum of 1929 (levels by private engineering firm).

REMARKS.--Estimated daily discharges: Oct. 1, 1985, Dec. 10, 1985 to Apr. 21, 1986, and Dec. 12-31, 1986. Records good except for periods of no gage-height record, Oct. 1, Dec. 10 to Feb. 9, and Feb. 19 to Apr. 21, and Dec. 12-31, 1986, and period with ice effect, Feb. 10-18, which are poor. Some water diverted through hatchery and returned to the stream upstream from gage.

AVERAGE DISCHARGE.--5 years, 263 ft³/s, 143 in/yr, 190,500 acre-ft/year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 6,000 ft³/s, Oct. 22, 1981, gage height, 11.19 ft, estimate of peak flow by slope-area methods; minimum discharge, 49 ft³/s, Mar. 13 and 14, 1983.

EXTREMES FOR CURRENT PERIOD.--Water year 1986: Maximum discharge, 5,200 ft³/s, Oct. 5, gage height, 10.93 ft, from rating curve extended above 610 ft³/s on basis of slope-area measurements, at gage heights, 8.98 and 9.55 ft, and estimate by slope-area method at gage height, 11.19 ft; minimum recorded, 60 ft³/s, Apr. 26, but may have been less during period of no gage-height record, Feb. 24 to Apr. 12.

October to December 1986: Maximum discharge during period, 2,030 ft³/s, Nov. 13, gage height, 9.14 ft, from rating curve extended as explained above; minimum daily, about 100 ft³/s, Dec. 29, 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	320	174	592	250	130	85	70	101	174	374	366	250
2	272	169	457	200	130	85	70	146	176	347	1110	217
3	259	170	396	170	150	80	70	138	275	379	360	203
4	238	320	383	160	500	80	70	111	247	674	294	229
5	2110	293	347	160	1500	80	70	140	234	462	259	771
6	1350	276	314	160	800	80	70	138	231	368	234	1340
7	1670	215	307	155	500	80	70	117	229	325	253	632
8	1070	1350	419	150	350	80	70	119	295	282	234	293
9	783	860	479	150	250	80	70	217	263	256	424	242
10	541	453	400	150	180	75	70	218	283	241	283	220
11	528	364	300	145	150	75	70	151	345	241	247	217
12	513	311	600	145	120	75	90	130	267	253	238	664
13	388	269	500	145	115	75	150	122	289	223	223	2490
14	355	259	400	140	115	75	120	107	272	469	220	664
15	379	241	350	140	110	75	110	101	307	380	223	449
16	395	229	300	140	110	75	100	108	310	297	266	478
17	326	214	250	140	100	75	94	113	307	296	339	763
18	296	211	400	140	98	75	100	107	254	386	280	417
19	281	483	250	140	96	75	120	100	244	446	250	621
20	969	841	200	140	94	75	100	97	241	443	220	466
21	467	1070	200	140	92	75	90	105	229	498	214	360
22	345	713	190	140	92	75	86	121	220	710	226	304
23	294	1090	190	130	90	75	77	121	226	444	247	266
24	266	764	180	130	90	75	82	132	263	345	234	259
25	250	728	180	130	90	75	81	136	272	399	335	370
26	229	942	400	130	85	70	76	150	382	319	379	340
27	278	738	300	130	85	70	81	158	375	363	301	355
28	239	575	350	150	85	70	80	148	359	329	245	347
29	206	931	800	200	---	70	84	195	301	273	494	273
30	195	649	400	150	---	70	115	203	300	256	301	244
31	185	---	300	130	---	70	---	183	---	259	263	---
TOTAL	15997	15902	11134	4680	6307	2350	2606	4233	8170	11337	9562	14744
MEAN	516	530	359	151	225	75.8	86.9	137	272	366	308	491
MAX	2110	1350	800	250	1500	85	150	218	382	710	1110	2490
MIN	185	169	180	130	85	70	70	97	174	223	214	203
CFSM	20.6	21.2	14.4	6.04	9.00	3.03	3.48	5.48	10.9	14.6	12.3	19.6
IN.	23.80	23.66	16.57	6.96	9.38	3.50	3.88	6.30	12.16	16.87	14.23	21.94
AC-FT	31730	31540	22080	9280	12510	4660	5170	8400	16210	22490	18970	29240

CAL YR 1985 TOTAL 110996 MEAN 304 MAX 2110 MIN 55 CFSM 12.2 IN 165.16 AC-FT 220200
WTR YR 1986 TOTAL 107022 MEAN 293 MAX 2490 MIN 70 CFSM 11.7 IN 159.24 AC-FT 212300

15297610 RUSSELL CREEK NEAR COLD BAY--Continued

DISCHARGE, IN CUBIC FEET PER SECOND, OCTOBER TO DECEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	234	178	230									
2	208	178	195									
3	198	171	495									
4	185	167	282									
5	174	176	235									
6	253	154	211									
7	282	376	265									
8	266	844	331									
9	381	552	318									
10	269	319	351									
11	312	300	290									
12	314	288	250									
13	293	1110	200									
14	263	456	300									
15	217	348	900									
16	220	351	400									
17	397	314	600									
18	283	272	500									
19	375	244	500									
20	308	226	350									
21	318	214	450									
22	282	206	350									
23	282	195	300									
24	253	185	270									
25	223	167	240									
26	211	188	200									
27	195	422	150									
28	188	280	120									
29	178	209	100									
30	174	305	100									
31	174	---	110									
TOTAL	7910	9395	9593									
MEAN	255	313	309									
MAX	397	1110	900									
MIN	174	154	100									
CFSM	10.2	12.5	12.4									
IN.	11.77	13.98	14.27									
AC-FT	15690	18630	19030									

CAL YR 1986 TOTAL 90887 MEAN 249 MAX 2490 MIN 70 CFSM 9.96 IN 135.23 AC-FT 180300

15299900 TAZIMINA RIVER NEAR NONDALTON

LOCATION.--Lat 59°55'05", long 154°39'34", in SE¼NE¼ sec.18, T.3 S., R.31 W., Hydrologic Unit 19040002, on left bank at outlet of small lake, 2.1 mi upstream of large waterfall, 7.5 mi southeast of Nondalton, and 14.5 mi northeast of Iliamna.

DRAINAGE AREA.--327 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1981 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Elevation of gage is 610 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1981 at datum 3.00 ft higher.

REMARKS.--Estimated daily discharges: Oct. 25-27, Oct. 29 to Nov. 5, Nov. 10-17, 19-21, 23-25, Nov. 27 to Dec. 3 and Dec. 5 to June 1. Records good except for period of no gage-height record, Feb. 27 to June 1 and period with ice effect, Oct. 25-27, Oct. 29 to Nov. 5, Nov. 10-17, 19-21, 23-25, Nov. 27 to Dec. 3 and Dec. 5 to Feb. 26, which are poor. Satelite telemetry installed June 2, 1986. Unpublished records of stage for the period, October 1986 to March 1987, are available in files of Anchorage Subdistrict Office.

AVERAGE DISCHARGE.--5 years, 869 ft³/s, 36.09 in/yr, 629,600 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,560 ft³/s, Sept. 30, 1985, gage-height, 8.23 ft; minimum, 94 ft³/s, Mar. 31, 1985, result of freezeup.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,540 ft³/s, Oct. 1, stage falling, peak occurred Sept. 30, 1985; maximum peak discharge, 2560 ft³/s, Sept. 23, gage height, 653 ft; minimum daily, about 160 ft³/s, Feb. 6 to Apr. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5390	630	265	190	170	160	160	180	1230	1610	1390	1780
2	4870	606	260	180	170	160	160	180	1270	1710	1320	1690
3	4220	588	255	180	170	160	160	180	1270	1870	1280	1560
4	3670	570	250	180	170	160	160	180	1280	1980	1380	1470
5	3150	552	250	180	170	160	160	180	1300	2020	1450	1360
6	2750	516	245	180	160	160	160	190	1330	2010	1470	1300
7	2460	480	240	180	160	160	160	190	1340	1980	1440	1420
8	2420	460	240	180	160	160	160	190	1350	1900	1430	1910
9	2600	440	235	180	160	160	160	190	1380	1790	1410	2340
10	2550	425	235	180	160	160	160	190	1390	1670	1410	2380
11	2380	410	230	180	160	160	160	200	1380	1590	1390	2280
12	2200	400	230	180	160	160	160	210	1360	1560	1380	2150
13	2030	390	225	180	160	160	160	220	1350	1520	1380	2010
14	1860	380	225	180	160	160	160	230	1340	1460	1490	1860
15	1800	370	220	180	160	160	160	250	1380	1410	1880	1740
16	1790	360	220	170	160	160	160	270	1540	1410	2140	1730
17	1670	350	210	170	160	160	160	290	1840	1370	2150	1710
18	1520	342	210	170	160	160	160	320	2160	1320	2150	1670
19	1370	338	210	170	160	160	160	350	2350	1280	2080	1640
20	1300	334	210	170	160	160	160	380	2350	1370	1970	1940
21	1230	330	200	170	160	160	160	420	2310	1520	1840	2310
22	1140	327	200	170	160	160	160	460	2180	1610	1730	2490
23	1070	318	200	170	160	160	160	500	2050	1730	1760	2540
24	997	312	200	170	160	160	160	560	1900	1960	1940	2420
25	941	306	200	170	160	160	160	620	1760	2050	2030	2270
26	880	298	200	170	160	160	170	700	1630	2030	2020	2080
27	831	285	200	170	160	160	170	800	1540	1920	2100	1960
28	782	280	190	170	160	160	170	900	1480	1790	2100	1800
29	719	275	190	170	---	160	170	1000	1480	1660	2050	1690
30	678	270	190	170	---	160	170	1100	1530	1530	1960	1610
31	654	---	190	170	---	160	---	1180	---	1460	1880	---
TOTAL	61922	11942	6825	5430	4530	4960	4850	12810	48050	52090	53400	57110
MEAN	1997	398	220	175	162	160	162	413	1602	1680	1723	1904
MAX	5390	630	265	190	170	160	170	1180	2350	2050	2150	2540
MIN	654	270	190	170	160	160	160	180	1230	1280	1280	1300
CFSM	6.11	1.22	.67	.54	.50	.49	.50	1.26	4.90	5.14	5.27	5.82
IN.	7.04	1.36	.78	.62	.52	.56	.55	1.46	5.47	5.93	6.07	6.50
AC-FT	122800	23690	13540	10770	8990	9840	9620	25410	95310	103300	105900	113300

CAL YR 1985 TOTAL 410720 MEAN 1125 MAX 5390 MIN 128 CFSM 3.44 IN 46.72 AC-FT 814700
WTR YR 1986 TOTAL 323919 MEAN 887 MAX 5390 MIN 160 CFSM 2.71 IN 36.85 AC-FT 642500

15299900 TAZIMINA RIVER NEAR NONDALTON--Continued

WATER-QUALITY RECORDS

PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: May 1982 to September 1986 (discontinued).

INSTRUMENTATION.--Digital water-temperature recorder since May 20, 1982. Recorder set for thirty-minute-intervals punches.

REMARKS.--Records represent water temperature at sensor within 0.5°C.

EXTREMES FOR PERIOD OF DAILY RECORD.--
WATER TEMPERATURE: Maximum, 18.5°C, Aug. 16, 1984; minimum, 0.0°C, on many days during winter periods.

EXTREMES FOR CURRENT YEAR.--
WATER TEMPERATURE: Maximum, 15.5°C, July 19; minimum, 0.0°C, on many days during winter period.

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	OCTOBER		NOVEMBER		DECEMBER		JANUARY		FEBRUARY		MARCH	
1	7.0	7.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
2	7.0	7.0	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0
3	7.0	6.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
4	7.0	6.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
5	7.0	6.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
6	6.5	6.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
7	6.5	6.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
8	6.5	6.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
9	6.0	6.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
10	6.0	5.5	.0	.0	.5	.0	.0	.0	.0	.0	.0	.0
11	5.5	5.0	.5	.0	.5	.5	.0	.0	.0	.0	.0	.0
12	5.5	5.0	.5	.0	.5	.0	.0	.0	.0	.0	.0	.0
13	5.5	5.0	.0	.0	1.0	.5	.0	.0	.5	.0	.0	.0
14	5.5	4.5	.0	.0	1.0	.5	.0	.0	.5	.0	.0	.0
15	5.0	4.5	.0	.0	.5	.5	.0	.0	.5	.0	.0	.0
16	5.0	4.5	.0	.0	.5	.5	.0	.0	.0	.0	.0	.0
17	5.0	3.5	.5	.0	.5	.0	.0	.0	.0	.0	.0	.0
18	3.5	2.0	.0	.0	1.0	.0	.0	.0	.0	.0	1.0	.0
19	2.0	1.0	.0	.0	1.0	.0	.0	.0	.0	.0	1.0	.0
20	2.0	1.5	.0	.0	1.0	.0	.0	.0	.0	.0	1.5	.0
21	2.5	1.0	.0	.0	1.0	.5	.0	.0	.0	.0	1.5	.0
22	1.5	.5	.0	.0	1.0	.5	.0	.0	.0	.0	2.5	.0
23	1.0	.5	.0	.0	1.0	.5	.0	.0	.0	.0	2.5	.0
24	.5	.0	.0	.0	.5	.0	.0	.0	.0	.0	3.0	.5
25	.0	.0	.0	.0	.5	.0	.0	.0	.0	.0	2.5	1.0
26	.0	.0	.0	.0	1.0	.5	.0	.0	.0	.0	1.5	.0
27	.0	.0	.0	.0	1.0	.5	.0	.0	.0	.0	2.5	.0
28	.0	.0	.0	.0	1.0	.5	.0	.0	.0	.0	2.0	.0
29	.0	.0	.0	.0	.5	.5	.0	.0	---	---	1.5	.0
30	.0	.0	.0	.0	.5	.0	.0	.0	---	---	2.0	.0
31	.0	.0	---	---	.5	.5	.0	.0	---	---	2.5	.0
MONTH	7.0	.0	.5	.0	1.0	.0	.5	.0	.5	.0	3.0	.0

15299900 TAZIMINA RIVER NEAR NONDALTON--Continued

TEMPERATURE, WATER (DEG. C), WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DAY	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN
	APRIL		MAY		JUNE		JULY		AUGUST		SEPTEMBER	
1	1.5	.0	7.0	2.0	8.5	7.0	12.5	10.0	13.5	11.0	11.0	10.0
2	4.0	1.0	4.0	2.5	7.5	6.5	12.5	11.0	13.5	11.0	10.5	10.0
3	3.5	.0	5.5	2.5	7.5	6.0	13.0	10.5	12.0	11.5	11.0	9.5
4	2.0	.0	5.5	2.5	8.5	5.5	12.0	10.5	12.0	11.0	11.5	9.5
5	1.5	.0	7.5	2.0	9.0	6.0	11.5	10.0	12.0	11.0	11.0	10.0
6	1.0	.0	6.5	2.5	7.5	6.0	10.5	10.0	12.0	11.0	9.5	9.0
7	1.0	.0	7.5	2.5	8.0	6.5	11.0	10.0	11.5	11.0	9.5	9.0
8	1.0	.0	5.5	2.5	9.5	6.5	11.5	9.5	11.5	11.0	9.0	8.0
9	1.5	.0	4.0	2.5	9.0	7.0	12.0	10.0	11.5	10.5	9.0	8.0
10	2.0	.0	5.0	2.5	10.0	7.5	12.5	10.5	11.5	10.5	9.0	8.0
11	3.5	1.0	5.5	2.5	9.0	7.5	11.5	11.0	12.0	10.0	9.0	8.5
12	3.5	1.0	6.5	3.0	8.5	7.0	11.5	10.5	11.0	10.5	9.5	8.5
13	4.0	.5	4.5	2.5	10.0	6.5	12.0	10.0	11.0	10.0	10.0	8.5
14	3.5	1.0	5.0	3.0	9.0	7.5	13.0	10.0	10.5	9.5	10.5	9.0
15	4.0	1.0	6.5	3.0	11.5	7.5	11.5	10.5	10.5	9.5	9.5	9.5
16	5.5	1.5	7.5	3.0	12.0	8.5	12.5	10.5	11.0	9.5	10.0	9.0
17	4.5	1.0	7.0	4.0	11.0	8.5	13.0	10.5	11.0	10.0	10.0	9.0
18	4.5	1.5	8.0	3.5	9.0	8.0	13.5	11.0	11.5	10.0	9.5	9.0
19	6.0	1.0	7.0	4.0	9.0	7.5	15.5	12.0	12.0	10.5	9.0	8.5
20	5.5	1.0	6.5	4.0	8.0	7.5	14.5	13.0	12.5	10.5	9.5	9.0
21	4.5	.5	9.0	3.5	8.0	7.0	15.0	12.5	11.5	10.5	9.5	8.0
22	4.5	1.0	8.0	4.0	9.5	7.5	13.0	12.5	11.5	11.0	9.0	8.0
23	5.5	1.5	9.5	4.5	10.0	8.5	12.5	11.5	11.0	10.5	8.0	7.5
24	5.5	1.0	9.5	5.0	9.0	8.0	12.0	11.0	11.5	10.0	7.5	7.0
25	4.5	1.5	9.5	5.5	10.0	7.5	11.0	10.5	10.5	10.0	7.5	6.5
26	5.0	2.0	9.5	5.5	9.5	8.0	11.5	10.0	11.0	10.0	7.0	6.5
27	5.5	.5	10.0	6.0	10.5	8.5	13.0	10.5	11.5	10.0	7.5	7.0
28	7.0	1.5	10.5	7.0	10.0	9.0	13.5	11.0	12.0	10.5	8.0	7.0
29	7.5	1.5	11.0	7.0	10.5	8.5	14.0	11.0	11.0	10.5	8.0	7.5
30	7.0	1.5	9.5	7.5	11.5	9.0	13.5	11.0	11.0	10.0	---	7.5
31	---	---	10.0	7.0	---	---	12.0	11.0	11.5	10.0	---	---
MONTH	7.5	.0	11.0	2.0	12.0	5.5	15.5	9.5	13.5	9.5	11.5	6.5
YEAR	15.5	.0										

15300000 NEWHALEN RIVER NEAR ILIAMNA

LOCATION.--Lat 59°51'34", long 154°52'24", in SW¼,NE¼ sec.1, T.4 S., R.33 W., Hydrologic Unit 19040002, on left bank 8 mi downstream from Fish Village and outlet of Sixmile Lake, 8 mi north of Iliamna, and 16 mi upstream from mouth.

DRAINAGE AREA.--3,478 mi².

PERIOD OF RECORD.--July 1951 to September 1967 and annual maximum, waters years 1968 to 1977. May 1982 to September 1986 (discontinued).

REVISED RECORDS.--WSP 2136: Drainage area.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 210 ft above National Geodetic Vertical Datum of 1929, from topographic map. October 1967 to September 1977, crest-stage gage at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 26-28, Nov. 2-4, Nov. 20 to June 1, and Aug. 4 to Sept. 2. Records good except for a period of no gage-height record, Aug. 4 to Sept. 2, which is fair, and another period of no gage-height record, Dec. 11 to June 1, and the periods with ice effect, Oct. 26-28, Nov. 2-4, and Nov. 20 to Dec. 10, which are poor.

AVERAGE DISCHARGE.--20 years (water years 1952-67,1983-86), 9,204 ft³/s, 35.94 in/yr, 6,668,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 36,000 ft³/s, Aug. 30, 1959, gage height, 9.19 ft; minimum daily, about 1,000 ft³/s, Feb. 1 to Mar. 31, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 23,100 ft³/s, Oct. 2, gage height, 6.63 ft; minimum daily, about 2,900 ft³/s, Feb. 21 to Apr. 25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	22700	10500	5000	3600	3100	2900	2900	3000	5000	11700	18700	19600
2	23000	10200	5000	3500	3100	2900	2900	3100	5150	11900	18500	19500
3	23000	9900	4900	3500	3100	2900	2900	3100	5310	12400	18400	19300
4	22900	9600	4800	3500	3100	2900	2900	3100	5390	13100	18300	19000
5	22700	9220	4800	3500	3100	2900	2900	3200	5370	13900	18100	18600
6	22300	8950	4700	3500	3000	2900	2900	3200	5640	14700	18000	18100
7	21900	8590	4600	3400	3000	2900	2900	3200	6030	15200	17900	18100
8	21900	7910	4500	3400	3000	2900	2900	3300	6210	15700	17800	18100
9	21900	8000	4500	3400	3000	2900	2900	3300	6350	16200	17700	18400
10	21700	8070	4400	3400	3000	2900	2900	3400	6470	16300	17600	18500
11	21300	7830	4400	3400	3000	2900	2900	3400	6580	16300	17500	18300
12	21000	7770	4300	3300	3000	2900	2900	3500	6730	16400	17400	18100
13	20600	7570	4300	3300	3000	2900	2900	3500	6790	16600	17600	17700
14	20100	7250	4200	3300	3000	2900	2900	3600	6970	16700	18000	17300
15	19600	7130	4200	3300	3000	2900	2900	3600	7130	16700	19400	17200
16	19400	7000	4100	3300	3000	2900	2900	3700	7280	16900	20100	17200
17	19000	6850	4100	3300	3000	2900	2900	3700	7760	16800	20300	17200
18	18600	6700	4000	3200	3000	2900	2900	3800	8370	16500	20200	17300
19	17800	6440	4000	3200	3000	2900	2900	3900	9120	16400	20000	17500
20	17000	6300	3900	3200	3000	2900	2900	4000	9820	16800	19800	18000
21	16500	6100	3900	3200	2900	2900	2900	4000	10500	17300	19700	18200
22	15900	6000	3800	3200	2900	2900	2900	4100	10700	18200	19600	18600
23	15300	5800	3800	3200	2900	2900	2900	4200	10900	18800	19700	19000
24	14700	5800	3800	3200	2900	2900	2900	4300	11200	19500	19800	18900
25	14000	5600	3700	3200	2900	2900	2900	4400	11200	20000	19900	18600
26	13500	5600	3700	3100	2900	2900	3000	4500	11100	20100	20100	18200
27	13000	5400	3700	3100	2900	2900	3000	4600	11100	20000	20000	18100
28	12500	5400	3600	3100	2900	2900	3000	4600	11100	19800	19900	17700
29	11900	5200	3600	3100	---	2900	3000	4700	11200	19500	19900	17300
30	11400	5200	3600	3100	---	2900	3000	4800	11400	19200	19800	16900
31	10900	---	3600	3100	---	2900	---	4900	---	19000	19700	---
TOTAL	568000	217880	129500	102100	83700	89900	87500	117700	243870	518600	589400	544500
MEAN	18320	7263	4177	3294	2989	2900	2917	3797	8129	16730	19010	18150
MAX	23000	10500	5000	3600	3100	2900	3000	4900	11400	20100	20300	19600
MIN	10900	5200	3600	3100	2900	2900	2900	3000	5000	11700	17400	16900
CFSM	5.27	2.09	1.20	.95	.86	.83	.84	1.09	2.34	4.81	5.47	5.22
IN.	6.08	2.33	1.39	1.09	.90	.96	.94	1.26	2.61	5.55	6.30	5.82
AC-FT	1127000	432200	256900	202500	166000	178300	173600	233500	483700	1029000	1169000	1080000

CAL YR 1985 TOTAL 3948340 MEAN 10820 MAX 28600 MIN 2590 CFSM 3.11 IN 42.23 AC-FT 7832000
WTR YR 986 TOTAL 3292650 MEAN 9021 MAX 23000 MIN 2900 CFSM 2.59 IN 35.22 AC-FT 6531000

15300500 KVICHAK RIVER AT IGIUGIG

LOCATION.--Lat 59°19'44", long 155°53'57", in NE¼ sec.7, T.10 S., R.39 W., Hydrologic Unit 19040002, on left bank 0.7 mi downstream from outlet of Iliamna Lake at Igiugig.

DRAINAGE AREA.--6,500 mi², approximately.

PERIOD OF RECORD.--August 1967 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 45 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 1, 1969, nonrecording gage at site 1,500 ft upstream at different datum.

REMARKS.--Estimated daily discharges: Mar. 26 to May 27. Records good except for period of no gage-height record, Mar. 26 to May 27, which is fair. GOES satellite telemeter at station. Discharge affected by storage in Lake Iliamna, Lake Clark, and other smaller lakes covering over 1,100 mi².

AVERAGE DISCHARGE.--19 years, 17,720 ft³/s, 37.02 in/yr, 12,840,000 acre ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 48,700 ft³/s. Sept. 12, 1980, gage height, 23.64 ft; minimum daily, 6,400 ft³/s, Apr. 21, 22, 1969.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 35,600 ft³/s, Dec. 8, gage height, 22.42 ft; minimum daily, about 8,800 ft³/s, May 4-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	29800	27900	24900	19100	16700	13400	10000	9000	9570	12200	16500	22600
2	30100	27700	22600	19200	16600	13400	10000	9000	10500	12500	17400	22400
3	30600	27900	22300	19400	16500	13300	9800	9000	12000	12600	16800	22600
4	30700	29500	21900	19700	16400	13400	9800	8800	10700	12900	17200	22900
5	31300	28500	21300	19200	16500	13400	9800	8800	10100	13400	17300	23300
6	31900	27700	21000	19100	16700	13200	9600	8800	10500	13200	17700	24100
7	32300	26700	22100	19000	16400	12600	9600	8800	10400	13100	18200	24000
8	32500	28000	29000	19500	16400	12500	9600	8800	10700	13300	18500	23500
9	31900	30600	26700	19300	17200	12600	9600	8800	10500	13100	19100	23900
10	31900	26800	22400	20100	17300	12500	9400	8800	10700	12900	18800	24100
11	32400	25800	20900	19500	16400	12600	9400	8800	11400	12800	18900	24300
12	32800	25800	21100	19300	15800	12600	9400	8800	11800	13100	19000	24500
13	32400	25300	21600	18800	15600	12500	9400	8800	11100	13300	18900	25000
14	32600	25100	21300	19800	15400	12400	9400	8800	10900	13900	19200	25400
15	32400	25300	20500	19600	15300	12400	9400	8800	10800	14500	19500	25400
16	31900	25300	20200	20300	15200	12500	9400	8800	11000	13900	19600	25400
17	32000	24900	20400	19900	15200	12100	9400	8800	11100	13800	19700	25500
18	32200	25600	21400	20200	15200	11800	9400	9000	11100	14000	20100	25500
19	31600	25300	20100	20700	14700	11300	9200	9000	11600	14100	20100	26300
20	32000	26500	20500	19700	14400	11700	9200	9000	12200	14300	20300	26000
21	31500	27100	20800	18500	14500	11600	9200	9000	11600	14600	20100	26000
22	30900	25200	20700	17800	14400	11500	9200	9000	11600	15000	20100	25800
23	30700	23600	19900	18100	14000	11400	9200	9000	11700	14700	20500	25700
24	30600	23300	19800	18900	13900	11300	9200	9000	12000	15100	21200	25900
25	30300	23600	21400	18400	13700	11100	9200	9000	12100	15500	21900	26500
26	29700	26100	22600	19200	13700	11000	9200	9000	12100	15600	22800	28200
27	29800	23100	20100	18300	13500	11000	9000	9200	12400	15700	21800	26500
28	29300	23100	20400	17500	13500	11000	9000	9210	12600	16000	21900	26600
29	29000	24000	20300	17300	---	10500	9000	9370	12300	16100	22500	26100
30	28700	24300	19900	17200	---	10500	9000	9450	12300	16200	23100	25800
31	28600	---	19200	16900	---	10000	---	9570	---	16300	22700	---
TOTAL	964400	779600	667300	589500	431100	373600	282000	278000	339370	437700	611400	749800
MEAN	31110	25990	21530	19020	15400	12050	9400	8968	11310	14120	19720	24990
MAX	32800	30600	29000	20700	17300	13400	10000	9570	12600	16300	23100	28200
MIN	28600	23100	19200	16900	13500	10000	9000	8800	9570	12200	16500	22400
CFSM	4.79	4.00	3.31	2.93	2.37	1.85	1.45	1.38	1.74	2.17	3.03	3.85
IN.	5.52	4.46	3.82	3.37	2.47	2.14	1.61	1.59	1.94	2.50	3.50	4.29
AC-FT	1913000	1546000	1324000	1169000	855100	741000	559300	551400	673100	868200	1213000	1487000

CAL YR 1985 TOTAL 6531360 MEAN 17890 MAX 32800 MIN 7840 CFSM 2.75 IN 37.38 AC-FT 12950000
WTR YR 1986 TOTAL 6503770 MEAN 17820 MAX 32800 MIN 8800 CFSM 2.74 IN 37.22 AC-FT 12900000

15302000 NUYAKUK RIVER NEAR DILLINGHAM

LOCATION.--Lat 59°56'08", long 158°11'16", in NE¼NE¼ sec.10, T.3 S., R.52 W., Hydrologic Unit 19040002, on left bank 350 ft downstream from Tikchik Lake. 0.6 mi upstream from unnamed tributary, and 62 mi north of Dillingham.

DRAINAGE AREA.--1,490 mi^2, approximately.

PERIOD OF RECORD.--May 1953 to current year.

REVISED RECORDS.--WRD Alaska 1972: 1971.

GAGE.--Water-stage recorder. Elevation of gage is 325 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Oct. 8, 1983, at site 650 ft downstream at different datum; but datum was 2.00 ft higher from May 1953 to Oct. 1, 1957.

REMARKS.--Estimated daily discharges: Oct. 19 to June 30. Records good except for period of no gage-height record, Oct. 19 to June 30, which is poor. GOES satellite telemeter at station. Discharge affected by storage in Tikchik Lake, Nuyakuk Lake, Lake Chauekuktuli, and other smaller lakes covering over 170 mi^2. of the basin.

AVERAGE DISCHARGE.--33 years, 6,134 ft^3/s, 55.91 in/yr, 4,444,000 acre-ft/year.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 32,200 ft^3/s, July 2, 1977, gage height, 10.49 ft, site and datum then in use; minimum daily, about 770 ft^3/s. Apr. 16-30, 1960.

EXTREMES FOR CURRENT YEAR.--Maximum discharge recorded, 17,800 ft^3/s, July 4, gage height, 9.60 ft, but may have been more during period of no gage-height record, June 25-30; minimum daily, about 1,700 ft^3/s, Apr. 30 to May 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9330	6100	4000	3100	2400	2100	1900	1700	6000	17600	11700	11300
2	9460	5900	4000	3100	2400	2100	1900	1700	6400	17600	11500	11400
3	9400	5700	4000	3100	2400	2100	1900	1700	7000	17600	11900	11300
4	9380	5600	4000	3100	2400	2100	1900	1700	7600	17700	12100	11200
5	9450	5500	3900	3100	2400	2100	1900	1700	8000	17500	12200	11000
6	9350	5400	3900	3000	2300	2000	1850	1750	8600	17400	12100	10900
7	9080	5300	3900	3000	2300	2000	1850	1750	9000	17300	12000	11400
8	8600	5200	3800	3000	2300	2000	1850	1800	9300	17200	11900	11700
9	8120	5100	3800	3000	2300	2000	1850	1800	9600	17000	11700	11600
10	7950	5000	3800	3000	2300	2000	1850	1900	9900	16800	12000	11500
11	8040	5000	3700	2900	2200	2000	1850	1900	10000	16500	12100	11300
12	8110	4900	3700	2900	2200	2000	1850	2000	10500	16200	12000	11100
13	8230	4800	3700	2900	2200	2000	1850	2000	10500	15900	11900	11000
14	8510	4700	3600	2900	2200	2000	1850	2050	10500	15400	11700	10800
15	8630	4700	3600	2900	2200	2000	1850	2100	10500	15100	11500	10700
16	8660	4600	3500	2800	2200	1950	1800	2200	10500	15000	11300	10600
17	8710	4600	3500	2800	2200	1950	1800	2300	10500	14800	11000	10400
18	8850	4500	3400	2800	2200	1950	1800	2400	10500	14500	10800	10200
19	8800	4500	3400	2800	2200	1950	1800	2500	10500	14200	10500	10000
20	8500	4400	3300	2800	2100	1950	1800	2700	10500	14100	10200	10200
21	8200	4400	3300	2700	2100	1950	1800	2800	11000	13800	10000	10100
22	8100	4300	3300	2700	2100	1950	1800	3000	11500	13600	9820	10100
23	7900	4300	3300	2700	2100	1950	1800	3200	12000	13800	9690	9760
24	7600	4300	3300	2700	2100	1950	1800	3400	12500	13700	9510	9480
25	7400	4200	3300	2600	2100	1950	1800	3600	13000	13600	9330	9250
26	7200	4200	3200	2600	2100	1900	1750	3900	14000	13400	9250	8980
27	7000	4200	3200	2600	2100	1900	1750	4200	14500	13200	9990	9000
28	6800	4100	3200	2500	2100	1900	1750	4500	15500	12900	10400	8950
29	6600	4100	3200	2500	---	1900	1750	4900	16000	12600	10500	9000
30	6400	4100	3200	2500	---	1900	1700	5200	17000	12300	10700	8980
31	6200	---	3200	2400	---	1900	---	5600	---	12000	11200	---
TOTAL	254560	143700	110200	87500	62200	61400	54700	83950	322900	470300	342490	313200
MEAN	8212	4790	3555	2823	2221	1981	1823	2708	10760	15170	11050	10440
MAX	9460	6100	4000	3100	2400	2100	1900	5600	17000	17700	12200	11700
MIN	6200	4100	3200	2400	2100	1900	1700	1700	6000	12000	9250	8950
CFSM	5.51	3.22	2.39	1.90	1.49	1.33	1.22	1.82	7.22	10.2	7.42	7.01
IN.	6.36	3.59	2.75	2.18	1.55	1.53	1.37	2.10	8.06	11.74	8.55	7.82
AC-FT	504900	285000	218600	173600	123400	121800	108500	166500	640500	932800	679300	621200

CAL YR 1985 TOTAL 2331950 MEAN 6389 MAX 23000 MIN 1110 CFSM 4.29 IN 58.22 AC-FT 4625000
WTR YR 1986 TOTAL 2307100 MEAN 6321 MAX 17700 MIN 1700 CFSM 4.24 IN 57.60 AC-FT 4576000

15302500 NUSHAGAK RIVER AT EKWOK
(National stream-quality accounting network station)

LOCATION.--Lat 59°20'57", long 157°28'23", in SE¼SE¼ sec.35, T.9 S., R.48 W., Hydrologic Unit 19040002, on right bank at Ekwok, 0.6 mi upstream from Klutuk Creek, and 40 mi northeast of Dillingham.

DRAINAGE AREA.--9,850 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1977 to current year.

GAGE.--Nonrecording gage. Elevation of gage is 90 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Apr. 17, 1979, at site 0.4 mi downstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 20 to May 9. Records good except for period of no gage-height record, Oct. 20 to May 9, which is poor.

AVERAGE DISCHARGE.--9 years, 22,450 ft³/s, 30.95 in/yr, 16,270,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge observed, 89,200 ft³/s, June 8, 1982, gage height, 13.22 ft; maximum gage height, 14.46 ft, from floodmarks, site and datum then in use, in April 1979, backwater from ice; minimum daily discharge, about 5,600 ft³/s, Apr. 21 to May 2, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge observed, 59,500 cfs, Oct. 1, gage height, 10.47 ft; minimum daily, about 7,400 ft³/s, Apr. 15-29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	59100	21000	15000	11000	8800	7800	7600	8000	25300	30300	26200	34900
2	57300	21000	14500	11000	8600	7800	7600	8600	26300	30100	26300	35100
3	51600	20000	14500	11000	8600	7800	7600	9200	27700	30100	27300	33500
4	45900	20000	14500	11000	8600	7800	7600	10000	28600	29700	28800	32100
5	42300	19500	14000	10500	8400	7800	7600	11000	33000	29100	31000	30100
6	39900	19500	14000	10500	8400	7800	7600	12500	37800	29000	30700	30600
7	39600	19000	14000	10500	8400	7800	7600	14000	36000	29000	30000	34100
8	44300	19000	14000	10500	8400	7800	7600	16000	31700	29600	29300	38800
9	56000	18500	13500	10500	8400	7800	7600	18000	30300	29600	30100	46000
10	54300	18500	13500	10000	8200	7800	7600	23500	29400	29600	32200	50600
11	59100	18000	13500	10000	8200	7800	7600	23800	28600	28900	34900	44600
12	51800	18000	13000	10000	8200	7800	7600	23400	27700	28400	34600	37800
13	44000	18000	13000	10000	8200	7800	7600	23600	27800	28400	32300	34000
14	40600	18000	13000	10000	8200	7800	7600	26000	28200	28000	31000	31700
15	38100	17500	13000	10000	8000	7800	7400	25500	28500	27200	29900	30600
16	37100	17500	13000	9800	8000	7800	7400	23700	28400	26700	29900	32500
17	36700	17500	12500	9800	8000	7800	7400	24200	28700	26600	30100	36200
18	35400	17000	12500	9600	8000	7800	7400	25800	29200	26100	29400	36500
19	31200	17000	12500	9600	8000	7800	7400	26900	29800	25200	28600	33800
20	30000	16500	12500	9400	8000	7800	7400	27600	30300	24500	28600	36300
21	29000	16500	12000	9400	8000	7800	7400	25100	30800	23900	27300	46800
22	28000	16000	12000	9400	8000	7800	7400	22600	31100	24800	26000	52600
23	27000	16000	12000	9200	8000	7800	7400	20900	31400	27100	26100	48900
24	26000	16000	12000	9200	8000	7800	7400	21000	31700	31400	27900	43200
25	25000	15500	12000	9200	7800	7800	7400	22000	32200	33500	31900	38700
26	24500	15500	11500	9000	7800	7800	7400	24600	33000	33600	33800	34900
27	24000	15500	11500	9000	7800	7800	7400	27300	33000	34600	33200	33800
28	23000	15500	11500	9000	7800	7600	7400	27200	32100	33000	33200	34600
29	22500	15000	11500	9000	---	7600	7400	26300	31100	30300	33500	36600
30	22000	15000	11000	8800	---	7600	7600	24800	30600	28100	34000	36800
31	21500	---	11000	8800	---	7600	---	24500	---	26700	34500	---
TOTAL	1166800	527500	398000	304700	228800	241000	225000	647600	910300	893100	942600	1126700
MEAN	37640	17580	12840	9829	8171	7774	7500	20890	30340	28810	30410	37560
MAX	59100	21000	15000	11000	8800	7800	7600	27600	37800	34600	34900	52600
MIN	21500	15000	11000	8800	7800	7600	7400	8000	25300	23900	26000	30100
CFSM	3.82	1.79	1.30	1.00	.83	.79	.76	2.12	3.08	2.93	3.09	3.81
IN.	4.41	1.99	1.50	1.15	.86	.91	.85	2.45	3.44	3.37	3.56	4.26
AC-FT	2314000	1046000	789400	604400	453800	478000	446300	1285000	1806000	1771000	1870000	2235000

CAL YR 1985 TOTAL 8541500 MEAN 23400 MAX 82500 MIN 5600 CFSM 2.38 IN 32.26 AC-FT 16940000
WTR YR 1986 TOTAL 7612100 MEAN 20860 MAX 59100 MIN 7400 CFSM 2.12 IN 28.75 AC-FT 15100000

15302500 NUSHAGAK RIVER AT EKWOK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1979 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
OCT								
03...	1712	290	45	7.20	5.5	760	12.6	100
03...	1713	515	45	7.20	5.5	760	12.6	100
03...	1714	765	43	7.10	5.5	760	12.6	100
MAR								
11...	1400	135	65	7.10	0.0	744	10.8	76
11...	1405	255	65	7.10	0.0	744	10.7	75
11...	1410	375	65	6.90	0.0	744	10.8	76
11...	1415	495	65	6.90	0.0	744	11.2	78
11...	1420	615	65	7.00	0.0	744	10.8	76
11...	1425	705	65	6.60	0.0	744	11.3	79
11...	1430	825	65	6.50	0.0	744	10.9	76
MAY								
29...	1255	235	43	7.20	11.0	759	10.7	97
29...	1256	410	43	7.20	10.5	759	10.6	96
29...	1257	560	43	7.20	10.5	759	10.7	96
29...	1258	710	43	7.20	10.5	759	10.9	98
29...	1259	860	43	7.30	10.5	759	11.0	99
JUL								
02...	1325	225	57	7.40	13.5	758	10.4	101
02...	1326	375	57	7.30	13.5	758	10.3	99
02...	1327	575	57	7.40	13.0	758	10.3	98
02...	1328	725	57	7.50	13.0	758	10.5	100
02...	1329	875	57	7.60	13.0	758	10.6	101
AUG								
29...	1010	250	50	7.30	10.5	759	9.8	89
29...	1011	450	50	7.40	10.5	759	9.8	89
29...	1012	650	50	7.40	10.5	759	9.9	89
29...	1013	775	50	7.50	10.5	759	10.0	90
29...	1014	875	50	7.50	10.5	759	10.0	90

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	TUR- BID- ITY (NTU) (00076)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
OCT											
03...	1715	975	52000	5.5	K13	>100	23	5	6.6	1.5	1.8
MAR											
11...	1445	915	7830	0.70	<1	<1	27	2	7.8	1.8	2.0
MAY											
29...	1300	965	25800	5.6	<1	<1	18	0	5.0	1.4	1.5
JUL											
02...	1330	965	29900	2.5	--	--	24	1	7.3	1.5	1.5
AUG											
29...	1015	965	32700	2.1	K12	K8	22	2	6.5	1.5	1.9

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L - CACO3) (99430)	BICAR- BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR- BONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
OCT										
03...	0.40	*18	--	--	--	7.1	1.2	<0.10	8.4	37
MAR										
11...	0.60	25	25	30	0	4.6	1.1	0.10	9.5	37
MAY										
29...	0.60	*18	--	--	--	2.8	<0.20	<0.10	6.3	44
JUL										
02...	0.30	*23	--	--	--	5.4	3.5	<0.10	5.0	36
AUG										
29...	0.40	22	20	25	0	6.1	0.70	<0.10	6.3	37

K NON-IDEAL COLONY COUNT
* LABORATORY ALKALINITY VALUE

15302500 NUSHAGAK RIVER AT EKWOK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN, AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
OCT										
03...	38	<0.010	<0.100	0.040	0.040	0.26	0.30	0.030	0.010	0.010
MAR										
11...	42	<0.010	0.110	0.010	0.020	0.19	0.20	0.010	0.010	<0.010
MAY										
29...	--	<0.010	<0.100	0.040	0.040	0.36	0.40	0.070	0.030	<0.010
JUL										
02...	39	<0.010	<0.100	0.010	0.020	0.19	0.20	0.010	0.010	0.010
AUG										
29...	36	<0.010	<0.100	0.030	<0.010	0.17	0.20	0.030	<0.010	<0.010

DATE	TIME	ALUM-INUM, DIS-SOLVED (UG/L AS AL) (01106)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)
OCT											
03...	1715	30	<1	8	<0.5	<1	<1	4	3	160	<1
MAR											
11...	1445	<10	<1	14	<1	<1	2	<3	2	71	5
JUL											
02...	1330	10	<1	10	<0.5	1	<1	<3	6	74	<5

DATE	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
OCT										
03...	<4	8	<0.1	<10	45	<1	<1	36	<6	5
MAR										
11...	<4	10	<0.1	<10	<1	<1	<1	45	<6	12
JUL										
02...	<4	5	<0.1	<10	1	<1	<1	41	<6	8

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT						
03...	1715	975	52000	28	3930	38
MAR						
11...	1445	915	7830	2	42	--
MAY						
29...	1300	965	25800	19	1320	80
JUL						
02...	1330	965	29900	14	1130	73
AUG						
29...	1015	965	32700	14	1240	84

15303010 SILVER SALMON CREEK NEAR ALEKNAGIK

LOCATION.--Lat 59°13'34", long 158°40'21", in NW¼ sec.14, T.11 S., R.56 W., Hydrologic Unit 19040002, on right bank 4.5 mi upstream from mouth at Wood River and 4 mi southwest of Aleknagik.

DRAINAGE AREA.--4.46 mi².

PERIOD OF RECORD.--Annual maximum, water years 1965-67 and 1969-83. October 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 170 ft above National Geodetic Vertical Datum of 1929, from topographic map. September 1964 to September 1967 and June 1969 to October 1983, crest-stage gage at site 150 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 22 to Aug. 27 and Sept. 4-30. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 340 ft³/s, June 12, 1967, gage height, 11.85, site then in use; maximum gage height, 12.65 ft, May 18, 1985; minimum discharge recorded, 1.3 ft³/s, Apr. 24, 25, 1985, but may have been less during the period, Nov. 11 to Dec. 31, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 104 ft³/s, Oct. 8, gage height, 10.52 ft, from rating curve extended above 30 ft³/s; minimum daily discharge, about 2.0 ft³/s, Apr. 1-25.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	27	14	11	5.0	3.2	2.4	2.0	2.5	34	12	6.4	14
2	25	14	10	4.8	3.2	2.4	2.0	2.7	33	11	23	13
3	24	14	9.4	4.8	3.2	2.4	2.0	3.1	31	10	24	12
4	23	13	8.8	4.8	3.2	2.4	2.0	3.0	33	9.5	16	11
5	22	13	8.0	4.8	3.2	2.4	2.0	2.9	35	9.0	9.0	10
6	45	13	7.6	4.6	3.0	2.4	2.0	2.8	37	9.5	7.6	12
7	50	12	7.2	4.6	3.0	2.4	2.0	2.8	38	10	7.0	11
8	98	12	7.2	4.6	3.0	2.4	2.0	2.9	36	9.0	6.8	10
9	75	12	7.0	4.4	3.0	2.4	2.0	3.0	34	8.5	16	9.4
10	53	12	7.0	4.4	3.0	2.2	2.0	3.1	30	8.0	20	8.8
11	45	11	6.8	4.4	2.8	2.2	2.0	3.3	28	7.6	17	8.4
12	42	11	6.8	4.2	2.8	2.2	2.0	3.6	25	7.3	21	8.0
13	37	11	6.6	4.2	2.8	2.2	2.0	3.9	23	7.0	21	8.2
14	33	11	6.6	4.2	2.8	2.2	2.0	4.2	22	6.9	18	10
15	42	10	6.4	4.0	2.8	2.2	2.0	4.6	20	10	17	9.0
16	33	10	6.4	4.0	2.8	2.2	2.0	5.2	19	8.5	16	8.4
17	28	10	6.2	4.0	2.8	2.2	2.0	5.8	18	7.2	15	9.3
18	26	10	6.2	3.8	2.8	2.2	2.0	6.6	17	6.8	14	10
19	24	10	6.0	3.8	2.6	2.2	2.0	7.6	16	6.6	13	30
20	22	9.8	6.0	3.8	2.6	2.2	2.0	8.6	16	6.5	12	45
21	21	9.6	5.8	3.8	2.6	2.2	2.0	9.6	15	15	12	36
22	20	9.4	5.8	3.6	2.6	2.2	2.0	11	15	27	14	28
23	19	9.4	5.6	3.6	2.6	2.2	2.0	12	14	20	16	22
24	19	9.2	5.6	3.6	2.6	2.2	2.0	14	15	15	14	19
25	18	10	5.4	3.6	2.6	2.2	2.0	16	18	11	13	16
26	17	34	5.4	3.4	2.4	2.2	2.1	18	16	9.4	15	22
27	17	25	5.4	3.4	2.4	2.2	2.2	20	15	8.6	14	40
28	16	18	5.2	3.4	2.4	2.2	2.2	23	14	8.2	16	37
29	16	14	5.2	3.4	---	2.2	2.3	26	13	7.6	14	33
30	15	12	5.2	3.4	---	2.2	2.4	29	12	7.0	16	29
31	15	---	5.0	3.4	---	2.2	---	32	---	6.6	16	---
TOTAL	967	383.4	206.8	125.8	78.8	70.0	61.2	292.8	692	306.3	459.8	539.5
MEAN	31.2	12.8	6.67	4.06	2.81	2.26	2.04	9.45	23.1	9.88	14.8	18.0
MAX	98	34	11	5.0	3.2	2.4	2.4	32	38	27	24	45
MIN	15	9.2	5.0	3.4	2.4	2.2	2.0	2.5	12	6.5	6.4	8.0
CFSM	7.00	2.87	1.50	.91	.63	.51	.46	2.12	5.18	2.22	3.32	4.04
IN.	8.06	3.20	1.72	1.05	.66	.58	.51	2.44	5.77	2.55	3.83	4.50
AC-FT	1920	760	410	250	156	139	121	581	1370	608	912	1070

CAL YR 1985 TOTAL 5645.4 MEAN 15.5 MAX 121 MIN 1.5 CFSM 3.48 IN 47.08 AC-FT 11200
WTR YR 1986 TOTAL 4183.4 MEAN 11.5 MAX 98 MIN 2.0 CFSM 2.58 IN 34.89 AC-FT 8300

15304000 KUSKOKWIM RIVER AT CROOKED CREEK
(National stream quality accounting and radiochemical networks station)

LOCATION.--Lat 61°52'16", long 158°06'03", in NE¼NE¼ sec.32, T.21 N., R.48 W., Hydrologic Unit 19040001, on right bank at village of Crooked Creek, 0.5 mi upstream from Crooked Creek.

DRAINAGE AREA.--31,100 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1951 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 200 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to Aug. 6, 1977, non-recording gage at site 600 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 1 to June 9, June 28 to July 13, and Aug. 7-19. Records good except for periods of estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--35 years, 40,900 ft³/s, 17.86 in/yr, 29,630,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 392,000 ft³/s, June 5, 1964, gage height, 25.74 ft; maximum gage-height, 26.36 ft, about May 16, 1968, from floodmarks, backwater from ice; minimum daily discharge, about 6,100 ft³/s, Mar. 1-31, 1966.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 141,000 ft³/s, Sept. 24, gage height, 13.09 ft; minimum daily, about 10,000 ft³/s, Apr. 15 to May 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	50000	26000	14000	11000	11000	10500	10500	10000	63000	51000	70100	83400
2	50000	26000	14000	11000	11000	10500	10500	10000	61000	51000	71600	81100
3	50000	26000	14000	11000	11000	10500	10500	10000	59000	51000	69100	78500
4	50000	26000	14000	11000	11000	10500	10500	11000	58000	52000	64400	75000
5	50000	26000	14000	11000	11000	10500	10500	11000	57000	53000	62500	71700
6	45000	24000	13000	11000	11000	10500	10500	11000	57000	55000	60100	68300
7	45000	24000	13000	11000	11000	10500	10500	11000	56000	54000	58000	65400
8	45000	24000	13000	11000	11000	10500	10500	11000	56000	55000	58000	65900
9	45000	24000	13000	11000	11000	10500	10500	11000	55500	56000	57000	74400
10	45000	24000	13000	11000	11000	10500	10500	12000	54600	58000	57000	90600
11	40000	21000	12000	11000	11000	10500	10500	12000	51000	57000	56000	98600
12	40000	21000	12000	11000	11000	10500	10500	13000	49100	56000	57000	98200
13	40000	21000	12000	11000	11000	10500	10500	13000	50700	55000	57000	96200
14	40000	21000	12000	11000	11000	10500	10500	14000	49400	53700	58000	91800
15	40000	21000	12000	11000	11000	10500	10000	14000	49500	53300	59000	86400
16	35000	19000	11500	11000	10500	10500	10000	15000	50400	51700	60000	85300
17	35000	19000	11500	11000	10500	10500	10000	16000	49500	50100	61000	90700
18	35000	19000	11500	11000	10500	10500	10000	18000	50500	49900	60000	99500
19	35000	19000	11500	11000	10500	10500	10000	20000	56200	49300	59000	102000
20	35000	19000	11500	11000	10500	10500	10000	23500	58300	48300	58900	103000
21	30000	17000	11000	11000	10500	10500	10000	29500	61900	50000	57400	110000
22	30000	17000	11000	11000	10500	10500	10000	36500	62100	57000	56000	127000
23	30000	17000	11000	11000	10500	10500	10000	47000	60900	61100	57000	138000
24	30000	17000	11000	11000	10500	10500	10000	64000	58500	67600	63900	140000
25	30000	17000	11000	11000	10500	10500	10000	70000	55800	79000	71000	138000
26	28000	15000	11000	11000	10500	10500	10000	73000	53700	85500	83800	131000
27	28000	15000	11000	11000	10500	10500	10000	75000	51300	85100	93500	121000
28	28000	15000	11000	11000	10500	10500	10000	74000	50000	83700	94500	111000
29	28000	15000	11000	11000	---	10500	10000	73000	50000	79600	93300	105000
30	28000	15000	11000	11000	---	10500	10000	70000	51000	74500	90700	103000
31	28000	---	11000	11000	---	10500	---	66000	---	71100	86900	---
TOTAL	1168000	610000	373500	341000	301500	325500	307000	944500	1646900	1854500	2061700	2930000
MEAN	37680	20330	12050	11000	10770	10500	10230	30470	54900	59820	66510	97670
MAX	50000	26000	14000	11000	11000	10500	10500	75000	63000	85500	94500	140000
MIN	28000	15000	11000	11000	10500	10500	10000	10000	49100	48300	56000	65400
CFSM	1.21	.65	.39	.35	.35	.34	.33	.98	1.77	1.92	2.14	3.14
IN.	1.40	.73	.45	.41	.36	.39	.37	1.13	1.97	2.22	2.47	3.50
AC-FT	2317000	1210000	740800	676400	598000	645600	608900	1873000	3267000	3678000	4089000	5812000

CAL YR 1985 TOTAL 15202400 MEAN 41650 MAX 230000 MIN 10000 CFSM 1.34 IN 18.18 AC-FT 30150000
WTR YR 1986 TOTAL 12864100 MEAN 35240 MAX 140000 MIN 10000 CFSM 1.13 IN 15.39 AC-FT 25520000

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1951, 1955-72, 1974 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLE LOC-ATION, CROSS SECTION (FT FM L BANK) (00009)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
APR								
16...	1700	150	229	7.10	0.0	757	5.9	41
16...	1705	250	235	7.50	0.0	757	5.5	38
16...	1710	350	243	7.70	0.0	757	5.5	38
16...	1715	450	251	7.40	0.0	757	5.5	38
16...	1720	550	256	7.50	0.0	757	5.3	37
16...	1725	650	260	7.40	0.0	757	5.1	35
JUN								
10...	1725	675	118	7.70	11.5	783	10.5	93
10...	1726	750	128	7.80	11.5	783	10.5	94
10...	1727	825	144	7.90	12.0	783	10.6	95
10...	1728	875	150	7.90	12.0	783	10.6	95
10...	1729	1050	154	7.80	12.0	783	10.7	97
AUG								
20...	1655	500	173	8.00	11.5	769	10.2	92
20...	1656	650	179	8.00	11.5	769	10.2	92
20...	1657	750	187	8.00	11.5	769	10.2	92
20...	1658	850	192	8.00	11.5	769	10.3	93
20...	1659	1020	192	8.00	11.0	769	10.3	93
SEP								
27...	1855	400	135	8.60	4.0	754	10.9	84
27...	1856	650	144	8.60	3.5	754	11.0	84
27...	1857	750	147	8.60	3.5	754	11.3	86
27...	1858	900	154	8.50	3.5	754	11.7	89
27...	1859	1100	156	8.50	3.5	754	11.8	90

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)
APR 16...	1730	765	9800	1.2	--	--	130	14	38	8.5	2.6
JUN 10...	1800	1220	55400	22	K10	K6	70	12	20	4.9	1.9
AUG 20...	1700	1180	57600	28	37	< 1	82	8	23	6.0	1.9
SEP 27...	1900	1320	118000	87	K26	K9	80	15	23	5.4	1.7

DATE	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
APR 16...	1.0	118	116	141	0	15	0.90	0.20	13	153
JUN 10...	0.70	58	58	71	0	14	0.70	0.10	7.1	96
AUG 20...	1.0	75	74	90	0	21	0.70	0.20	7.1	109
SEP 27...	0.90	66	65	--	--	20	0.80	0.10	7.9	118

DATE	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	NITRO-GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) (00608)	NITRO-GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS-PHORUS, TOTAL (MG/L AS P) (00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) (00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
APR 16...	150	< 0.010	0.210	0.040	0.070	0.16	0.20	0.010	< 0.010	< 0.010
JUN 10...	85	< 0.010	0.100	0.010	0.030	0.29	0.30	0.080	0.010	< 0.010
AUG 20...	110	< 0.010	0.100	0.020	0.030	0.28	0.30	0.050	0.010	0.010
SEP 27...	100	< 0.010	0.120	0.030	0.020	0.37	0.40	0.060	0.030	0.010

K NON-IDEAL COLONY COUNT

15304000 KUSKOKWIM RIVER AT CROOKED CREEK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)
APR 16...	1730	<10	<1	62	0.9	<1	1	<3	2	59	<1
JUN 10...	1800	20	<1	30	0.5	<1	<1	<3	1	170	<5
SEP 27...	1900	60	1	27	<0.5	<1	1	<3	4	190	<5

DATE	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
APR 16...	<4	36	<0.1	<10	1	1	1	200	<6	4
JUN 10...	4	5	<0.1	<10	1	<1	<1	110	<6	10
SEP 27...	<4	4	<0.1	<10	1	<1	<1	130	<6	6

DATE	TIME	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DISSOLVED, EXTRACTION (UG/L) (80020)
JUN 10...	1800	<0.7	0.8	0.9	1.3	0.9	1.2	0.02	0.49

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)
APR 16...	1730	765	9800	5	132	--	--
JUN 10...	1800	1220	55400	76	11400	--	--
AUG 20...	1700	1180	57600	93	14500	19	30
SEP 27...	1900	1320	118000	287	91400	15	23

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)
APR 16...	--	--	--	--	--	--	--
JUN 10...	--	--	--	77	85	98	100
AUG 20...	--	48	--	64	72	98	100
SEP 27...	33	45	60	77	87	98	100

DATE	TIME	BED MAT. SIEVE DIAM. % FINER THAN .125 MM (80165)	BED MAT. SIEVE DIAM. % FINER THAN .250 MM (80166)	BED MAT. SIEVE DIAM. % FINER THAN .500 MM (80167)	BED MAT. SIEVE DIAM. % FINER THAN 1.00 MM (80168)	BED MAT. SIEVE DIAM. % FINER THAN 2.00 MM (80169)	BED MAT. SIEVE DIAM. % FINER THAN 4.00 MM (80170)	BED MAT. SIEVE DIAM. % FINER THAN 8.00 MM (80171)	BED MAT. SIEVE DIAM. % FINER THAN 16.0 MM (80172)	BED MAT. SIEVE DIAM. % FINER THAN 32.0 MM (80173)	BED MAT. SIEVE DIAM. % FINER THAN 64.0 MM (80174)
SEP 27...	1855	0	1	43	60	68	74	78	81	83	100
27...	1856	--	--	0	1	1	5	17	49	92	100
27...	1857	--	0	1	1	1	2	6	17	92	100
27...	1858	--	--	--	--	--	--	0	1	44	100
27...	1859	--	--	--	--	--	--	0	1	5	100

15304200 KISARALIK RIVER NEAR AKIAK

LOCATION.--Lat 60°21'10", long 159°55'00", in SE¼NW¼ sec.17, T.3 N., R.61 W., Hydrologic Unit 19040001, on left bank, 1.2 mi upstream from Upper Falls, 4.2 mi upstream from Quicksilver Creek, and 59.5 mi southeast of Akiak.

DRAINAGE AREA.--265 mi^2.

PERIOD OF RECORD.--October 1979 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,050 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 27 to July 15. Records fair except for period with ice effect, Oct. 27 to Mar. 23, and period of no gage-height record, Mar. 24 to July 15, which are poor.

AVERAGE DISCHARGE.--7 years, 878 ft^3/s, 44.16 in/yr, 636,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,520 ft^3/s, June 28, 1982, gage height, 9.44 ft; minimum daily, about 120 ft^3/s, Mar. 6 to Apr. 20, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,740 ft^3/s, July 4, gage-height, 9.01 ft, from floodmarks; minimum daily, about 210 ft^3/s, Mar. 1 to Apr. 17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1900	470	240	230	220	210	210	290	2100	4110	1910	1600
2	1730	450	240	230	220	210	210	290	2300	4280	1850	1560
3	1570	440	240	230	220	210	210	300	2600	4580	2060	1440
4	1450	420	240	230	220	210	210	310	2900	4680	2090	1330
5	1340	410	240	230	220	210	210	330	3300	4200	1940	1250
6	1300	390	240	230	220	210	210	340	3500	3800	1770	1180
7	1310	380	240	230	220	210	210	360	3700	3600	1630	1180
8	1330	370	240	230	220	210	210	370	3800	3400	1520	1300
9	1320	360	240	230	220	210	210	390	3900	3200	1460	1210
10	1260	350	240	230	220	210	210	410	3800	2800	1450	1140
11	1200	340	240	230	220	210	210	430	3700	2700	1400	1150
12	1140	330	240	230	220	210	210	460	3600	2600	1370	1110
13	1090	320	240	230	220	210	210	480	3500	2400	1320	1070
14	1020	310	240	230	220	210	210	500	3500	2200	1270	1060
15	1020	300	240	230	220	210	210	540	3400	2100	1260	1070
16	1010	300	240	230	220	210	210	570	3400	2010	1170	1020
17	959	290	240	230	220	210	210	610	3300	1940	1120	989
18	897	280	240	230	220	210	215	660	3300	1900	1100	958
19	847	280	240	230	220	210	215	700	3300	2150	1040	917
20	866	270	240	230	220	210	220	750	3300	2530	1010	978
21	817	270	240	230	220	210	220	810	3400	2320	1000	928
22	739	260	240	230	220	210	225	880	3400	2280	1020	896
23	758	260	240	230	220	210	230	950	3500	2930	1340	866
24	738	250	240	230	220	210	235	1050	3500	2960	1430	856
25	710	250	240	230	220	210	240	1100	3600	2550	1270	826
26	673	250	240	230	220	210	245	1200	3700	2280	1520	826
27	640	240	240	230	220	210	250	1350	3700	2090	2130	826
28	600	240	240	230	220	210	260	1450	3800	1930	2030	806
29	560	240	240	230	---	210	270	1600	3900	1850	1850	796
30	520	240	240	230	---	210	280	1750	4000	1950	1730	806
31	500	---	240	230	---	210	---	1900	---	2020	1670	---
TOTAL	31814	9560	7440	7130	6160	6510	6675	23130	102700	86340	46730	31944
MEAN	1026	319	240	230	220	210	223	746	3423	2785	1507	1065
MAX	1900	470	240	230	220	210	280	1900	4000	4680	2130	1600
MIN	500	240	240	230	220	210	210	290	2100	1850	1000	796
CFSM	3.87	1.20	.91	.87	.83	.79	.84	2.82	12.9	10.5	5.69	4.02
IN.	4.47	1.34	1.04	1.00	.86	.91	.94	3.25	14.42	12.12	6.56	4.48
AC-FT	63100	18960	14760	14140	12220	12910	13240	45880	203700	171300	92690	63360

CAL YR 1985 TOTAL 286711 MEAN 786 MAX 3720 MIN 120 CFSM 2.97 IN 40.25 AC-FT 568700
WTR YR 1986 TOTAL 366133 MEAN 1003 MAX 4680 MIN 210 CFSM 3.79 IN 51.40 AC-FT 726200

15304293 BROWNS CREEK NEAR BETHEL

LOCATION.--Lat 60°48'20", long 161°49'22", in NE¼ NE¼ sec.12, T.8 N., R.72 W., Hydrologic Unit 19040001, on left bank 10 ft upstream from culverts on Imquieiq Drive, 2.0 mi northwest of Bethel, and about 2.5 mi upstream from Browns Slough.

DRAINAGE AREA.--4.79 mi^2.

PERIOD OF RECORD.--Annual maximum, water year 1985. April to September, 1986.

GAGE.--Non-recording gage. Elevation of gage is 30 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Apr. 1 to May 7, June 26 to July 17, July 19 to Aug. 21 and Aug. 23 to Sept. 16. Records fair except for periods with ice effect, Apr. 15-17 and Apr. 27 to May 7, and periods of no gage-height record, Apr. 1-14, 18-26, June 26 to July 17, July 19 to Aug. 21, and Aug. 23 to Sept. 16, and discharges below 1.0 ft^3/s, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 69 ft^3/s, revised, May 7, 1985, gage height, 18.52 ft; from floodmarks; maximum gage height, 20.50 ft, May 6, 1985, backwater from ice; no flow Apr. 1-9, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31 ft^3/s, Aug. 23, gage-height, 17.20 ft, from floodmarks; maximum gage height, 17.69 ft, Apr. 16, flow over ice; no flow, Apr. 1-9.

REVISIONS.--The maximum discharge for the water year 1985 has been revised to 69 ft^3/s, May 7, 1985, gage height, 18.52 ft, from floodmarks.

DISCHARGE, IN CUBIC FEET PER SECOND, APRIL TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1							.00	5.0	.47	.60	2.0	5.0
2							.00	4.5	.47	.55	1.8	6.0
3							.00	3.5	.49	.50	1.6	7.0
4							.00	3.0	.52	.45	1.4	7.0
5							.00	3.0	.52	.40	1.6	6.0
6							.00	3.0	.51	.40	1.4	5.0
7							.00	3.5	.53	.50	1.2	6.0
8							.00	4.1	.60	.50	1.4	5.0
9							.00	4.9	.56	.55	1.4	7.0
10							.10	7.1	.56	.60	2.0	8.0
11							1.0	6.5	.54	.80	1.8	9.0
12							1.5	5.7	.56	1.5	1.6	8.0
13							2.0	5.5	.57	1.3	2.0	7.0
14							3.0	4.2	.56	.80	3.0	8.0
15							6.5	3.3	.40	.90	2.5	7.0
16							9.5	2.5	.37	1.0	2.0	6.0
17							8.5	2.1	.38	.80	2.5	5.4
18							7.0	1.7	.39	.59	2.0	5.0
19							5.5	1.6	.39	.75	1.7	7.2
20							4.5	1.4	.40	1.0	1.7	7.8
21							4.0	.97	.40	.80	1.7	6.9
22							3.5	.70	.40	.70	3.2	6.2
23							3.0	.68	.40	1.0	20	5.3
24							3.0	.68	.40	2.0	15	4.7
25							2.5	.91	.41	1.8	10	4.4
26							3.5	.72	.75	1.5	9.0	4.4
27							3.0	.70	.70	1.2	8.0	5.9
28							2.5	.59	.60	1.0	6.0	7.2
29							3.0	.64	.50	.90	10	7.9
30							3.5	.64	.45	1.0	8.0	7.9
31							---	.52	---	.90	6.0	---
TOTAL							80.60	83.85	14.80	27.29	133.5	193.2
MEAN							2.69	2.70	.49	.88	4.31	6.44
MAX							9.5	7.1	.75	2.0	20	9.0
MIN							.00	.52	.37	.40	1.2	4.4
CFSM							.56	.56	.10	.18	.90	1.34
IN.							.63	.65	.11	.21	1.04	1.50
AC-FT							160	166	29	54	265	383

15344000 KING CREEK NEAR DOME CREEK

LOCATION.--Lat 64°23'38", long 141°24'43", in NE¼SW¼ sec.16, T.6 S., R.32 E., Hydrologic Unit 19030002, on left bank at mi 120 Taylor Highway, 1,100 ft upstream from culvert at mi 119.8, 0.4 mi upstream from mouth, 4.9 mi east of Dome Creek, and 29 mi south of Eagle.

DRAINAGE AREA.--5.87 mi².

PERIOD OF RECORD.--Annual maximums, water years 1975-82. May 1983 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,650 ft above National Geodetic Vertical Datum of 1929, from topographic map. Aug 10, 1975 to July 18, 1979, crest-stage gage 100 ft upstream of culvert at different datum. July 21, 1979 to May 11, 1983 crest-stage gage 100 ft downstream.

REMARKS.--Estimated daily discharges: Oct. 1 to May 20 and Sept. 16-22, 27-30. Records fair except for period of no gage-height record, Oct. 1 to May 20, and periods of ice effect, Sept. 16-22, 27-30, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 163 ft³/s, June 1982, gage height, 13.44 ft, site then in use, from rating curve extended above 20 ft³/s on the basis of slope-area measurement at gage height, 13.40 ft, site then in use, 16.65 ft, from floodmarks, present site; no flow during winter periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 15 ft³/s, about May 16, gage height, 14.66 ft; no flow, Oct. 21 to May 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.3	.00	.00	.00	.00	.00	.00	.00	3.0	.96	.60	.32
2	1.0	.00	.00	.00	.00	.00	.00	.00	2.5	.66	.53	.31
3	.80	.00	.00	.00	.00	.00	.00	.00	2.2	.55	.45	.31
4	.70	.00	.00	.00	.00	.00	.00	.00	2.0	.40	.40	.29
5	.60	.00	.00	.00	.00	.00	.00	.00	1.7	.38	.38	.28
6	.50	.00	.00	.00	.00	.00	.00	.10	1.7	.34	.38	.28
7	.40	.00	.00	.00	.00	.00	.00	.10	1.6	.32	.38	.26
8	.30	.00	.00	.00	.00	.00	.00	.10	1.5	.31	.35	.28
9	.30	.00	.00	.00	.00	.00	.00	.10	1.3	.29	.34	.34
10	.20	.00	.00	.00	.00	.00	.00	.20	1.3	.31	.32	.32
11	.20	.00	.00	.00	.00	.00	.00	.40	5.1	.38	.34	.28
12	.70	.00	.00	.00	.00	.00	.00	.60	5.9	.48	.45	.28
13	.10	.00	.00	.00	.00	.00	.00	1.0	3.9	1.6	.78	.28
14	.10	.00	.00	.00	.00	.00	.00	2.0	2.5	4.3	1.4	.28
15	.10	.00	.00	.00	.00	.00	.00	3.0	1.8	2.4	1.1	.25
16	.10	.00	.00	.00	.00	.00	.00	5.0	1.4	1.4	1.1	.20
17	.10	.00	.00	.00	.00	.00	.00	9.0	1.2	1.0	1.4	.20
18	.10	.00	.00	.00	.00	.00	.00	14	1.1	.72	1.1	.20
19	.10	.00	.00	.00	.00	.00	.00	12	1.1	.72	.90	.20
20	.10	.00	.00	.00	.00	.00	.00	10	.96	1.5	.72	.20
21	.00	.00	.00	.00	.00	.00	.00	8.4	.96	10	.72	.20
22	.00	.00	.00	.00	.00	.00	.00	5.9	.90	7.0	.72	.20
23	.00	.00	.00	.00	.00	.00	.00	4.6	1.3	3.6	.53	.28
24	.00	.00	.00	.00	.00	.00	.00	4.3	1.6	2.3	.50	.20
25	.00	.00	.00	.00	.00	.00	.00	3.7	1.7	1.6	.48	.16
26	.00	.00	.00	.00	.00	.00	.00	4.5	1.6	1.9	.43	.16
27	.00	.00	.00	.00	.00	.00	.00	5.4	1.2	2.4	.38	.10
28	.00	.00	.00	.00	.00	.00	.00	4.6	.96	1.6	.34	.10
29	.00	.00	.00	.00	---	.00	.00	2.9	.66	1.3	.35	.10
30	.00	.00	.00	.00	---	.00	.00	2.6	.78	.96	.34	.10
31	.00	---	.00	.00	---	.00	---	2.9	---	.72	.34	---
TOTAL	7.30	.00	.00	.00	.00	.00	.00	107.40	55.42	52.38	18.55	6.96
MEAN	.24	.000	.000	.000	.000	.000	.000	3.46	1.85	1.69	.60	.23
MAX	1.3	.00	.00	.00	.00	.00	.00	14	5.9	10	1.4	.34
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.66	.29	.32	.10
CFSM	.04	.000	.000	.000	.000	.000	.000	.59	.32	.29	.10	.04
IN.	.05	.00	.00	.00	.00	.00	.00	.68	.35	.33	.12	.04
AC-FT	14	.00	.00	.00	.00	.00	.00	213	110	104	37	14

CAL YR 1985 TOTAL 582.48 MEAN 1.60 MAX 34 MIN .00 CFSM .27 IN 3.69 AC-FT 1160
WTR YR 1986 TOTAL 248.01 MEAN .68 MAX 14 MIN .00 CFSM .17 IN 1.57 AC-FT 492

15356000 YUKON RIVER AT EAGLE

LOCATION.--Lat 64°47'22", long 141°11'52", in NW¼ sec.31, T.1 S., R.33 E., Hydrologic Unit 19030002, on left bank at Eagle, 0.1 mi upstream from Mission Creek, 1.1 mi downstream from Castalia Creek, and 11 mi downstream from the international boundry.

DRAINAGE AREA.--113,500 mi^2, approximately.

PERIOD OF RECORD.--January 1911 to December 1913, June 1950 to current year. Monthly discharge only for some periods, published in WSP 1372.

GAGE.--Water-stage recorder. Elevation of gage is 850 ft above National Geodetic Vertical Datum of 1929, from topographic map. See WSP 1936 for history of charges prior to Oct. 1, 1963. Nonrecording gage prior to June 26, 1982 at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 7 to May 21, June 12, and July 3-4. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--38 years, 82,890 ft^3/s, 9.92 in/yr, 60,050,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 545,000 ft^3/s, June 12, 1964, gage height, 33.85 ft; maximum gage height, 35.94 ft, in May 1962, from floodmarks, backwater from ice; minimum discharge measured, 8,100 ft^3/s, Mar. 7, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 303,000 ft^3/s, June 26, gage height, 24.12 ft; minimum daily, about 17,000 ft^3/s, Apr. 11 to May 2.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	101000	44000	30000	24000	21000	20000	18000	17000	277000	232000	201000	149000
2	99200	44000	30000	24000	21000	20000	18000	17000	280000	230000	193000	151000
3	98300	44000	30000	24000	21000	20000	18000	18000	274000	230000	185000	156000
4	98200	42000	30000	24000	21000	20000	18000	18000	269000	230000	176000	161000
5	97900	42000	30000	24000	21000	20000	18000	19000	263000	251000	170000	160000
6	96400	42000	28000	24000	21000	19000	18000	20000	259000	269000	166000	156000
7	96000	40000	28000	24000	21000	19000	18000	22000	261000	261000	162000	153000
8	94000	40000	28000	24000	21000	19000	18000	28000	261000	250000	156000	149000
9	90000	40000	28000	24000	21000	19000	18000	38000	267000	241000	151000	145000
10	86000	40000	28000	24000	21000	19000	18000	50000	276000	233000	147000	140000
11	82000	38000	28000	24000	21000	19000	17000	58000	283000	226000	146000	136000
12	80000	38000	28000	24000	21000	19000	17000	62000	290000	221000	147000	132000
13	76000	38000	28000	24000	21000	19000	17000	60000	288000	214000	148000	127000
14	74000	36000	28000	23000	21000	19000	17000	58000	282000	208000	148000	123000
15	70000	36000	28000	23000	21000	19000	17000	58000	266000	219000	150000	120000
16	68000	36000	26000	23000	20000	19000	17000	60000	243000	217000	152000	118000
17	66000	36000	26000	23000	20000	19000	17000	68000	223000	210000	158000	116000
18	64000	34000	26000	23000	20000	19000	17000	80000	213000	200000	177000	113000
19	62000	34000	26000	23000	20000	19000	17000	100000	212000	195000	186000	110000
20	60000	34000	26000	23000	20000	19000	17000	120000	216000	196000	184000	108000
21	58000	34000	26000	23000	20000	18000	17000	130000	235000	204000	182000	106000
22	56000	34000	26000	23000	20000	18000	17000	130000	254000	211000	182000	104000
23	56000	34000	26000	23000	20000	18000	17000	128000	268000	210000	182000	102000
24	54000	32000	26000	22000	20000	18000	17000	127000	283000	205000	177000	100000
25	52000	32000	26000	22000	20000	18000	17000	147000	292000	190000	172000	98500
26	50000	32000	26000	22000	20000	18000	17000	170000	300000	185000	169000	96700
27	50000	32000	26000	22000	20000	18000	17000	182000	297000	185000	168000	94300
28	48000	32000	26000	22000	20000	18000	17000	192000	276000	186000	166000	91800
29	48000	32000	26000	22000	---	18000	17000	204000	251000	203000	160000	91400
30	46000	32000	26000	22000	---	18000	17000	233000	236000	217000	155000	91100
31	46000	---	26000	22000	---	18000	---	264000	---	211000	151000	---
TOTAL	2223000	1104000	846000	718000	575000	583000	520000	2978000	7895000	6740000	5167000	3698800
MEAN	71710	36800	27290	23160	20540	18810	17330	92840	263200	217400	166700	123300
MAX	101000	44000	30000	24000	21000	20000	18000	264000	300000	269000	201000	161000
MIN	46000	32000	26000	22000	20000	18000	17000	17000	212000	185000	146000	91100
CFSM	.63	.32	.24	.20	.18	.17	.15	.82	2.32	1.92	1.47	1.09
IN.	.73	.36	.28	.24	.19	.19	.17	.94	2.59	2.21	1.69	1.21
AC-FT	4409000	2190000	1678000	1424000	1141000	1156000	1031000	5709000	15660000	13370000	10250000	7337000

CAL YR 1985 TOTAL 33126000 MEAN 90760 MAX 387000 MIN 18000 CFSM .80 IN 10.86 AC-FT 65710000
WTR YR 1986 TOTAL 32947800 MEAN 90270 MAX 300000 MIN 17000 CFSM .80 IN 10.80 AC-FT 65350000

15388950 PORCUPINE RIVER AT OLD CROW

LOCATION.--Lat 67°33'50", long 139°53'00", Yukon Territory, Canada, on right bank 1.2 mi downstream from Old Crow and 3.0 mi downstream from the Old Crow River.

DRAINAGE AREA.--21,400 mi², approximately.

PERIOD OF RECORD.--June 1961 to September 1964, June to September, 1965 and 1966, June 1968 to May 1981, October 1981 to May 1982, and September 1982 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,000 ft above National Geodetic Vertical Datum of 1929, from topographic map. Prior to July 1972, non-recording gage 1.25 mi upstream at different datum.

REMARKS.--Estimated daily discharges: Oct. 13 to June 8, June 19-25, July 1-30, and Sept. 29-30. Records good except for estimated daily discharges, which are poor. Differences between figures published herein and corresponding figures in reports of the Water Survey of Canada are due to variations in automated program techniques. After December 1978 figures published in reports of the Water Survey of Canada are in the metric system and have been converted to the English system for this report.

COOPERATION.--Discharge records furnished by the Water Survey of Canada.

AVERAGE DISCHARGE.--19 years (water years 1962-64, 69-80, and 1983-86), 11,630 ft³/s, 7.38 in/yr, 8,622,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge, 237,000 ft³/s, June 4, 1964; minimum not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 61,100 ft³/s, June 9, gage height, 23.75 ft; minimum daily, 540 ft³/s, May 4, 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	8900	2370	1200	879	837	699	593	547	1240	16100	26200	29200
2	10200	2300	1190	876	837	692	590	544	1410	13800	28200	29700
3	12100	2220	1190	872	837	674	593	544	1770	12100	27100	28100
4	12600	2190	1180	869	837	678	593	540	2300	10700	24100	25100
5	12100	2120	1170	865	830	681	597	540	3180	9680	20800	21700
6	11000	2050	1150	862	830	663	597	544	31800	8330	16900	18900
7	10200	1980	1140	862	830	657	597	544	54700	7420	14500	16600
8	9320	1910	1120	858	826	653	597	547	60400	6920	13500	14600
9	8230	1840	1110	858	823	650	593	551	60400	6430	13100	13100
10	7340	1800	1090	855	819	646	593	551	54700	6000	11900	11900
11	6600	1730	1080	855	816	643	590	554	47000	5970	11100	11700
12	6210	1660	1070	851	812	639	586	558	39200	7200	10200	11400
13	5830	1620	1050	851	809	646	583	561	32300	11200	9500	11100
14	5650	1590	1040	847	805	632	579	565	29100	16100	8720	11100
15	5470	1550	1020	847	798	632	576	569	26200	14100	8230	10900
16	5190	1520	1020	847	791	632	576	579	23300	12100	8020	10700
17	4910	1480	1010	844	784	632	572	590	21000	10600	8050	10500
18	4630	1450	1000	844	777	625	569	600	19600	9680	8860	10500
19	4340	1410	996	844	770	625	569	611	18400	9220	10300	10500
20	4060	1380	989	844	759	618	565	625	15600	8580	11900	11200
21	3850	1390	978	840	752	618	565	632	13600	8020	13900	12000
22	3670	1350	968	840	745	618	561	643	13400	8260	16500	12900
23	3460	1330	953	840	738	614	561	671	13200	11900	24900	12900
24	3280	1320	946	840	731	611	558	706	13400	11500	34700	12400
25	3070	1310	936	840	724	607	558	734	14800	10700	44500	12100
26	2970	1290	929	840	720	607	554	759	20000	9820	38500	11900
27	2900	1270	918	837	713	604	554	794	32300	9360	31200	11200
28	2790	1250	911	837	706	604	551	847	30400	9680	27000	9920
29	2680	1240	900	837	---	611	551	883	25100	12800	27800	8760
30	2580	1220	893	837	---	600	547	989	19900	23500	30000	7770
31	2510	---	883	837	---	597	---	1090	---	24300	30100	---
TOTAL	188640	49140	32030	26355	22056	19708	17268	20012	739700	342070	610280	430350
MEAN	6085	1638	1033	850	788	636	576	646	24660	11030	19690	14350
MAX	12600	2370	1200	879	837	699	597	1090	60400	24300	44500	29700
MIN	2510	1220	883	837	706	597	547	540	1240	5970	8020	7770
CFSM	.28	.08	.05	.04	.04	.03	.03	.03	1.15	.52	.92	.67
IN.	.33	.09	.06	.05	.04	.03	.03	.03	1.29	.59	1.06	.75
AC-FT	374200	97470	63530	52280	43750	39090	34250	39690	1467000	678500	1210000	853600

CAL YR 1985 TOTAL 3056349 MEAN 8374 MAX 127000 MIN 572 CFSM .39 IN 5.31 AC-FT 6062000
WTR YR 1986 TOTAL 2497609 MEAN 6843 MAX 60400 MIN 540 CFSM .32 IN 4.34 AC-FT 4954000

15439800 BOULDER CREEK NEAR CENTRAL

LOCATION.--Lat 65°34'05", long 144°53'13", in NW¼ sec.32, T.9 N., R.14 E., Hydrologic Unit 19030002, on right bank, 2,000 ft upstream from bridge at mi 125.4 Steese Highway, 0.7 mi upstream from mouth, and 2.3 mi west of Central.

DRAINAGE AREA.--31.3 mi^2.

PERIOD OF RECORD.--Annual maximums, water years 1964-66 and 1983. May 1966 to September 1982 and June 1984 to September 1986 (discontinued as a continuous-record station: converted to a crest-stage partial-record station).

REVISED RECORDS.--WDR AK-85-1: 1984.

GAGE.--Water-stage recorder. Elevation of gage is 1,075 ft above National Geodetic Vertical Datum of 1929, from topographic map. Aug. 3, 1963 to 1966, crest-stage gage at upstream side of bridge 2,000 ft downstream at different datum. May 23, 1966 to Sept. 27, 1969, water-stage recorder, on downstream side of bridge, at datum 7.02 ft higher than previous datum. Sept. 28, 1969 to July 31, 1971, nonrecording gage on downstream side of bridge, datum of prior recording gage.

REMARKS.--Estimated daily discharges: Oct. 16 to May 29 and Sept. 26-30. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--18 years (water years 1967-82, and 1985-86), 11.8 ft^3/s, 5.12 in/yr, 8,550 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 1,310 ft^3/s, June 15, 1984, gage height, 10.18 ft, recorded, 9.94 ft, from floodmarks, from rating curve extended above 200 ft^3/s on the basis of slope-area measurements at gage heights, 7.84 ft, 9.72 ft, and at peak flow; no flow at times during winter periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 140 ft^3/s, July 1, gage height, 5.58 ft; maximum gage height, 7.54 ft, May 15, backwater from ice; no flow, Nov. 11 to May 3.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	13	1.0	.00	.00	.00	.00	.00	.00	39	98	7.3	22
2	13	1.0	.00	.00	.00	.00	.00	.00	38	51	6.4	16
3	13	1.0	.00	.00	.00	.00	.00	.00	32	31	5.5	13
4	11	1.0	.00	.00	.00	.00	.00	.50	30	32	6.2	11
5	10	.50	.00	.00	.00	.00	.00	.50	29	21	7.1	9.8
6	11	.50	.00	.00	.00	.00	.00	.50	31	14	6.1	8.9
7	10	.50	.00	.00	.00	.00	.00	.50	25	10	4.8	8.0
8	10	.50	.00	.00	.00	.00	.00	1.0	22	14	4.2	7.7
9	10	.50	.00	.00	.00	.00	.00	1.0	41	42	3.7	8.0
10	9.7	.50	.00	.00	.00	.00	.00	1.0	56	39	3.2	7.9
11	9.3	.00	.00	.00	.00	.00	.00	2.0	36	52	2.9	7.4
12	8.6	.00	.00	.00	.00	.00	.00	3.0	87	50	2.8	6.9
13	6.9	.00	.00	.00	.00	.00	.00	5.0	56	34	2.8	6.6
14	9.0	.00	.00	.00	.00	.00	.00	10	31	29	2.6	6.3
15	10	.00	.00	.00	.00	.00	.00	15	20	22	2.5	5.9
16	8.0	.00	.00	.00	.00	.00	.00	20	14	15	2.7	5.8
17	7.0	.00	.00	.00	.00	.00	.00	25	10	11	2.7	6.5
18	7.0	.00	.00	.00	.00	.00	.00	30	8.6	9.4	2.7	7.2
19	6.0	.00	.00	.00	.00	.00	.00	40	42	8.5	2.7	7.6
20	5.5	.00	.00	.00	.00	.00	.00	50	74	14	2.6	7.6
21	5.0	.00	.00	.00	.00	.00	.00	60	52	25	2.8	7.4
22	4.5	.00	.00	.00	.00	.00	.00	65	35	23	4.5	6.6
23	4.0	.00	.00	.00	.00	.00	.00	70	37	16	6.3	6.7
24	3.5	.00	.00	.00	.00	.00	.00	80	49	12	5.5	5.8
25	3.5	.00	.00	.00	.00	.00	.00	85	32	9.4	4.5	5.8
26	3.0	.00	.00	.00	.00	.00	.00	90	22	12	3.7	4.8
27	2.5	.00	.00	.00	.00	.00	.00	80	16	26	3.4	4.2
28	2.5	.00	.00	.00	.00	.00	.00	70	12	22	8.9	4.0
29	2.0	.00	.00	.00	---	.00	.00	50	9.8	14	45	3.7
30	2.0	.00	.00	.00	---	.00	.00	40	8.5	10	48	3.5
31	1.5	---	.00	.00	---	.00	---	38	---	8.3	32	---
TOTAL	222.0	7.00	.00	.00	.00	.00	.00	933.00	994.9	774.6	246.1	232.6
MEAN	7.16	.23	.000	.000	.000	.000	.000	30.1	33.2	25.0	7.94	7.75
MAX	13	1.0	.00	.00	.00	.00	.00	90	87	98	48	22
MIN	1.5	.00	.00	.00	.00	.00	.00	.00	8.5	8.3	2.5	3.5
CFSM	.23	.007	.000	.000	.000	.000	.000	.96	1.06	.80	.25	.25
IN.	.26	.01	.00	.00	.00	.00	.00	1.11	1.18	.92	.29	.28
AC-FT	440	14	.00	.00	.00	.00	.00	1850	1970	1540	488	461

CAL YR 1985 TOTAL 6526.60 MEAN 17.9 MAX 200 MIN .00 CFSM .57 IN 7.76 AC-FT 12950
WTR YR 1986 TOTAL 3410.20 MEAN 9.34 MAX 98 MIN .00 CFSM .30 IN 4.05 AC-FT 6760

15453500 YUKON RIVER NEAR STEVENS VILLAGE

LOCATION.--Lat 65°52'32", long 149°43'04", in SE¼SW¼ sec.7, T. 12 N., R.10 W., Hydrologic Unit 19030002, on right downstream side of pier five, 730 ft from north abutment of bridge, on Dalton Highway, 0.5 mi downstream from Woodcamp Creek, 2.5 mi upstream from Ray river, and 21 mi southwest of Stevens Village.

DRAINAGE AREA.--196,300 mi², approximately.

PERIOD OF RECORD.--October 1976 to current year.

GAGE.--Water-stage recorder. Datum of gage is 240.00 ft above National Geodetic Vertical Datum of 1929.

REMARKS.-Estimated daily discharges: Oct. 17 to May 22. Records fair except estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--10 years, 118,900 ft^3/s, 8.23 in/yr, 86,140,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 670,000 ft^3/s, about June 9, 1977, gage height, 54.49 ft, from floodmarks; minimum daily, about 17,000 ft^3/s, Apr. 6-30, 1982.

EXTREMES OUTSIDE PERIOD OF RECORD.--Maximum discharge observed downstream at Rampart (station no. 15468000), 950,000 ft^3/s, June 15, 16, 1964.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 423,000 ft^3/s, June 14, gage height, 44.73 ft; minimum daily, 24,000 ft^3/s, Apr. 11 to May 5.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	141000	50000	40000	34000	30000	28000	26000	24000	246000	354000	238000	234000
2	138000	50000	40000	34000	30000	28000	26000	24000	259000	336000	245000	225000
3	136000	50000	40000	34000	30000	28000	26000	24000	287000	312000	253000	219000
4	134000	50000	40000	34000	30000	28000	26000	24000	319000	291000	251000	215000
5	132000	50000	40000	34000	30000	28000	26000	24000	340000	278000	247000	212000
6	131000	48000	40000	34000	30000	28000	26000	25000	352000	268000	245000	210000
7	129000	48000	40000	34000	30000	28000	26000	26000	360000	261000	242000	212000
8	128000	48000	40000	34000	30000	28000	26000	27000	368000	260000	235000	215000
9	128000	48000	40000	34000	30000	28000	26000	28000	379000	268000	227000	212000
10	126000	48000	40000	34000	30000	28000	26000	30000	389000	276000	219000	207000
11	123000	46000	38000	34000	30000	26000	24000	33000	401000	273000	215000	201000
12	119000	46000	38000	34000	30000	26000	24000	38000	412000	265000	208000	194000
13	116000	46000	38000	32000	30000	26000	24000	48000	418000	260000	199000	186000
14	113000	46000	38000	32000	30000	26000	24000	76000	421000	258000	192000	179000
15	110000	46000	38000	32000	30000	26000	24000	150000	413000	256000	189000	172000
16	99800	46000	38000	32000	28000	26000	24000	200000	394000	252000	187000	167000
17	90000	44000	38000	32000	28000	26000	24000	220000	373000	248000	185000	162000
18	80000	44000	38000	32000	28000	26000	24000	210000	353000	245000	184000	157000
19	74000	44000	38000	32000	28000	26000	24000	200000	332000	247000	183000	153000
20	70000	44000	38000	32000	28000	26000	24000	230000	308000	249000	185000	150000
21	66000	44000	36000	32000	28000	26000	24000	250000	287000	247000	190000	146000
22	64000	44000	36000	32000	28000	26000	24000	250000	273000	243000	200000	143000
23	62000	44000	36000	32000	28000	26000	24000	246000	268000	241000	209000	140000
24	60000	42000	36000	32000	28000	26000	24000	235000	275000	247000	213000	137000
25	58000	42000	36000	32000	28000	26000	24000	208000	290000	256000	227000	135000
26	56000	42000	36000	32000	28000	26000	24000	189000	303000	259000	244000	134000
27	56000	42000	36000	32000	28000	26000	24000	178000	324000	257000	245000	132000
28	54000	42000	36000	32000	28000	26000	24000	178000	347000	249000	244000	130000
29	54000	42000	36000	30000	---	26000	24000	192000	358000	238000	246000	127000
30	52000	42000	36000	30000	---	26000	24000	218000	362000	233000	246000	123000
31	52000	---	36000	30000	---	26000	---	238000	---	235000	242000	---
TOTAL	2951800	1368000	1176000	1010000	814000	826000	740000	4043000	10211000	8162000	6835000	5229000
MEAN	95220	45600	37940	32580	29070	26650	24670	130400	340400	263300	220500	174300
MAX	141000	50000	40000	34000	30000	28000	26000	250000	421000	354000	253000	234000
MIN	52000	42000	36000	30000	28000	26000	24000	24000	246000	233000	183000	123000
CFSM	.49	.23	.19	.17	.15	.14	.13	.66	1.73	1.34	1.12	.89
IN.	.56	.26	.22	.19	.15	.16	.14	.77	1.94	1.55	1.30	.99
AC-FT	5855000	2713000	2333000	2003000	1615000	1638000	1468000	8019000	20250000	16190000	13560000	10370000

CAL YR 1985 TOTAL 45934800 MEAN 125800 MAX 581000 MIN 20000 CFSM .64 IN 8.70 AC-FT 91110000
WTR YR 1986 TOTAL 43365800 MEAN 118800 MAX 421000 MIN 24000 CFSM .61 IN 8.22 AC-FT 86020000

15457800 HESS CREEK NEAR LIVENGOOD

LOCATION.--Lat 65°39'55", long 149°05'47", in NW¼ sec.30, T.10 N., R.7 W., Hydrologic Unit 19030002, on left bank 30 ft upstream from bridge at mi 22 on Dalton Highway, 1.0 mi downstream from Mastodon Creek, 4.0 mi upstream from Richardson Creek, and 18.6 mi northwest of Livengood.

DRAINAGE AREA.--662 mi².

PERIOD OF RECORD.--June 1970 to September 1978, July 1982 to September 1986 (discontinued).

REVISED RECORDS.--WDR AK-74: 1973.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft above National Geodetic Vertical Datum of 1929 (Alaska Department of Highways temporary bench mark). Prior to Sept. 30, 1978, at site on downstream side of bridge at same datum.

REMARKS.--Estimated daily discharges: Oct. 14 to May 13 and Sept. 26-30. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--12 years (water years 1971-78, 1983-86), 240 ft³/s, 4.92 in/yr, 173,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 10,000 ft³/s, May 13, 1975, gage height, 66.78 ft, site then in use; no flow during winter period in most years.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 4,020 ft³/s, June 12, gage height, 63.94 ft; no flow, Dec. 1 to Apr. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	435	8.0	.00	.00	.00	.00	.00	.40	178	81	1590	273
2	429	7.0	.00	.00	.00	.00	.00	.80	384	68	2150	236
3	451	6.0	.00	.00	.00	.00	.00	1.0	569	59	1490	212
4	463	6.0	.00	.00	.00	.00	.00	2.0	480	52	801	286
5	499	5.0	.00	.00	.00	.00	.00	3.0	384	44	479	369
6	472	4.0	.00	.00	.00	.00	.00	6.0	298	38	367	308
7	436	4.0	.00	.00	.00	.00	.00	10	226	34	284	253
8	404	4.0	.00	.00	.00	.00	.00	50	215	30	215	216
9	397	3.0	.00	.00	.00	.00	.00	400	433	27	166	190
10	475	3.0	.00	.00	.00	.00	.00	600	514	25	131	215
11	512	3.0	.00	.00	.00	.00	.00	640	822	23	114	262
12	429	3.0	.00	.00	.00	.00	.00	600	2420	22	106	241
13	305	2.0	.00	.00	.00	.00	.00	520	2660	21	122	215
14	220	2.0	.00	.00	.00	.00	.00	491	1130	41	124	193
15	160	2.0	.00	.00	.00	.00	.00	356	688	70	109	179
16	120	2.0	.00	.00	.00	.00	.00	260	439	48	98	165
17	100	2.0	.00	.00	.00	.00	.00	282	304	36	85	153
18	80	2.0	.00	.00	.00	.00	.00	273	218	28	76	146
19	64	2.0	.00	.00	.00	.00	.00	262	179	25	71	199
20	52	2.0	.00	.00	.00	.00	.00	377	157	27	103	350
21	44	1.0	.00	.00	.00	.00	.00	652	132	27	226	338
22	38	1.0	.00	.00	.00	.00	.00	715	190	28	1850	475
23	32	1.0	.00	.00	.00	.00	.00	630	523	68	1610	427
24	28	1.0	.00	.00	.00	.00	.00	592	458	91	816	339
25	22	1.0	.00	.00	.00	.00	.00	530	329	74	563	252
26	20	1.0	.00	.00	.00	.00	.00	463	260	64	524	140
27	16	1.0	.00	.00	.00	.00	.00	390	207	58	531	120
28	14	1.0	.00	.00	.00	.00	.00	353	158	73	441	100
29	12	1.0	.00	.00	---	.00	.00	264	124	129	398	90
30	10	1.0	.00	.00	---	.00	.00	204	100	112	369	80
31	9.0	---	.00	.00	---	.00	---	175	---	493	322	---
TOTAL	6748.0	82.0	.00	.00	.00	.00	.00	10102.20	15179	2016	16331	7022
MEAN	218	2.73	.000	.000	.000	.000	.000	326	506	65.0	527	234
MAX	512	8.0	.00	.00	.00	.00	.00	715	2660	493	2150	475
MIN	9.0	1.0	.00	.00	.00	.00	.00	.40	100	21	71	80
CFSM	.33	.004	.000	.000	.000	.000	.000	.49	.76	.10	.80	.35
IN.	.38	.00	.00	.00	.00	.00	.00	.57	.85	.11	.92	.39
AC-FT	13380	163	.00	.00	.00	.00	.00	20040	30110	4000	32390	13930

CAL YR 1985 TOTAL 147531.00 MEAN 404 MAX 5860 MIN .00 CFSM .61 IN 8.29 AC-FT 292600
WTR YR 1986 TOTAL 57480.20 MEAN 157 MAX 2660 MIN .00 CFSM .24 IN 3.23 AC-FT 114000

15476000 TANANA RIVER NEAR TANACROSS

LOCATION.--Lat 63°23'18", long 143°44'47", in NE¼ sec. 31, T.19 N., R.9 E., Hydrologic Unit 19030004, on right bank 0.2 mi north of Cathedral Rapids, 0.3 mi downstream from Cathedral Rapids Creek No. 1, 9 mi upstream from Robertson River, and 13 mi west of Tanacross.

DRAINAGE AREA.--8,550 mi^2, approximately.

PERIOD OF RECORD.--June 1953 to current year.

GAGE.--Water-stage recorder. Datum of gage is 1,489.58 ft above National Geodetic Vertical Datum of 1929. Prior to June 13, 1959, on left bank at site 120 ft upstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 6 to May 26, June 22 to July 10, and Sept. 24-30. Records good except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--33 years, 7,985 ft^3, 12.68 in/yr, 5,785,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 39,100 ft^3/s, June 19, 1962, gage height, 11.65 ft; maximum gage height, 11.70 ft, July 22, 1975; minimum daily discharge, 1,400 ft^3, Mar. 1-31, 1956.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 32,700 ft^3/s, July 23, gage height, 10.96 ft; minimum daily, 2,400 ft^3/s, Mar. 6 to Apr. 21.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	9300	5200	3800	3200	2800	2600	2400	3300	13500	18000	17100	10900
2	9300	5200	3800	3200	2800	2600	2400	3500	12900	16000	17700	10800
3	9600	5000	3800	3200	2800	2600	2400	3700	12700	15000	18500	10600
4	9600	5000	3800	3200	2800	2600	2400	3900	12600	14000	19300	9710
5	9000	5000	3800	3200	2800	2600	2400	4100	11700	14000	19700	9250
6	8800	4800	3800	3000	2800	2400	2400	4400	12000	15000	20000	9100
7	8600	4800	3600	3000	2800	2400	2400	4700	12400	16000	20300	8920
8	8400	4800	3600	3000	2800	2400	2400	5200	13100	19000	19100	9020
9	8200	4600	3600	3000	2800	2400	2400	5800	13700	22000	17100	9320
10	8000	4600	3600	3000	2600	2400	2400	6600	13100	27000	16100	8930
11	7600	4600	3600	3000	2600	2400	2400	7600	12800	27400	16000	8620
12	7400	4600	3600	3000	2600	2400	2400	8600	11800	27300	17100	8860
13	7200	4400	3600	3000	2600	2400	2400	9200	11000	27100	17600	8470
14	7200	4400	3600	3000	2600	2400	2400	9400	10600	26500	17500	7700
15	7000	4400	3400	3000	2600	2400	2400	9800	11000	25100	16900	7380
16	6800	4400	3400	3000	2600	2400	2400	10000	12500	23900	15100	7120
17	6600	4400	3400	3000	2600	2400	2400	10000	12800	23100	13700	6740
18	6600	4200	3400	3000	2600	2400	2400	10000	13300	23300	12900	6560
19	6400	4200	3400	3000	2600	2400	2400	9600	13600	23900	11800	6540
20	6200	4200	3400	3000	2600	2400	2400	9200	13700	26700	11200	6780
21	6200	4200	3400	3000	2600	2400	2400	9000	14700	29800	10800	7480
22	6000	4200	3400	2800	2600	2400	2500	9000	17000	31700	10700	7830
23	6000	4200	3400	2800	2600	2400	2500	9000	20000	32400	10300	8620
24	5800	4000	3400	2800	2600	2400	2600	9200	23000	30900	10600	9000
25	5800	4000	3200	2800	2600	2400	2600	9600	27000	28700	11100	8400
26	5600	4000	3200	2800	2600	2400	2700	10000	28000	27200	10300	8000
27	5600	4000	3200	2800	2600	2400	2800	10500	27000	25300	9470	7800
28	5400	4000	3200	2800	2600	2400	2900	10800	25000	24400	9200	7200
29	5400	4000	3200	2800	---	2400	3000	11200	22000	21800	9300	6800
30	5400	3800	3200	2800	---	2400	3100	12800	20000	18600	9690	6400
31	5200	---	3200	2800	---	2400	---	14000	---	17100	10400	---
TOTAL	220200	133200	108000	92000	74600	75400	75100	253700	474500	718200	446560	248850
MEAN	7103	4440	3484	2968	2664	2432	2503	8184	15820	23170	14410	8295
MAX	9600	5200	3800	3200	2800	2600	3100	14000	28000	32400	20300	10900
MIN	5200	3800	3200	2800	2600	2400	2400	3300	10600	14000	9200	6400
CFSM	.83	.52	.41	.35	.31	.28	.29	.96	1.85	2.71	1.69	.97
IN.	.96	.58	.47	.40	.32	.33	.33	1.10	2.06	3.12	1.94	1.08
AC-FT	436800	264200	214200	182500	148000	149600	149000	503200	941200	1425000	885800	493600

CAL YR 1985 TOTAL 3445270 MEAN 9439 MAX 34800 MIN 2500 CFSM 1.10 IN 14.99 AC-FT 6834000
WTR YR 1986 TOTAL 2920310 MEAN 8001 MAX 32400 MIN 2400 CFSM .94 IN 12.71 AC-FT 5792000

15484000 SALCHA RIVER NEAR SALCHAKET

LOCATION.--Lat 64°28'22", long 146°55'26", in NE¼ sec.22, T.5 S., R.4 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank 0.2 mi upstream from bridge on Richardson Highway, 0.5 mi east of Sno-Shu Inn, 2 mi upstream from mouth, and 6 mi southeast of Salchaket.

DRAINAGE AREA.--2,170 mi², approximately.

PERIOD OF RECORD.--July 1909 to August 1910, published as "at mouth" (no winter records), October 1948 to current year.

GAGE.--Water-stage recorder. Datum of gage is 631.85 ft above National Geodetic Vertical Datum of 1929. Prior to Aug. 10, 1910, nonrecording gage at site 1.5 mi downstream at different datum. Oct. 1, 1948 to Apr. 24, 1953, nonrecording gage, and Apr. 25, 1953 to Oct. 16, 1967, water-stage recorder at site 800 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 23 to May 11. Records good except for periods of ice effect, Oct. 23 to Nov. 15 and May 7-11, and for period of no gage-height record, Nov. 16 to May 6, which are poor. NOAA satellite telemetry at station.

AVERAGE DISCHARGE.--38 years (water years 1949-86), 1,662 ft³/s, 10.40 in/yr. 1,204,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 97,000 ft³/s, Aug. 14, 1967, gage height, 21.78 ft, present site, from floodmarks, from rating curve extended above 16,000 ft³/s on basis of slope-area measurement and slope-conveyance determination of peak flow; minimum not determined, monthly mean of 60 ft³/s published for March 1953.

EXTREMES FOR CURRENT YEAR.--Peak discharges greater than base discharge of 10,000 ft³/s and maximum (*):

Date	Time	Discharge (ft³/s)	Gage height (ft)	Date	Time	Discharge (ft³/s)	Gage height (ft)
June 25	1700	17,900	14.54	Aug. 23	1130	*37,100	*18.67
July 22	0230	21,300	15.41				

Minimum daily discharge, about 200 ft³/s, Apr. 1-17.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3770	600	560	540	300	230	200	560	3770	1660	2930	3250
2	3550	600	560	540	300	230	200	680	4530	2010	2700	3080
3	3340	600	560	540	290	230	200	800	4380	2440	2460	2980
4	3160	600	560	540	280	230	200	1000	3270	2000	2230	2870
5	2960	600	560	540	280	230	200	1500	2860	1740	2050	2740
6	2790	580	560	540	280	220	200	2500	2850	1500	1920	2630
7	2690	580	560	540	270	220	200	3600	3390	1330	1820	2530
8	2640	580	560	540	270	220	200	4300	3160	1240	1750	2460
9	2600	580	560	540	270	220	200	5000	3170	1370	1670	2430
10	2750	580	560	540	260	220	200	5200	2380	1410	1610	2430
11	2830	580	560	520	260	220	200	4000	2290	3200	1550	2390
12	2690	580	560	500	260	220	200	3330	3730	4850	1510	2320
13	2380	580	560	500	260	220	200	2940	3750	3430	1520	2250
14	2100	580	560	480	260	220	200	2600	2910	2610	1600	2200
15	2070	580	560	480	260	220	200	2260	2370	2190	1630	2140
16	1970	580	540	460	250	210	200	2320	1910	1850	1560	2110
17	1860	580	540	460	250	210	200	3020	1610	1580	1490	2070
18	1680	580	540	440	250	210	210	3480	1420	1460	1460	2060
19	1610	580	540	420	250	210	210	3740	1260	1950	1410	2040
20	1450	580	540	400	250	210	210	4290	1470	3940	1410	2010
21	1140	560	540	380	240	210	220	3990	2120	16000	2300	2000
22	840	560	540	380	240	210	230	3850	2860	15100	14300	2030
23	700	560	540	360	240	210	240	3880	3270	7130	31400	2020
24	640	560	540	360	240	210	250	3610	8480	4800	11700	1990
25	620	560	540	340	240	210	280	3540	15500	3780	7080	1930
26	620	560	540	340	230	210	300	3630	6930	3360	5680	1830
27	620	560	540	320	230	210	330	3770	3830	4560	4860	1770
28	600	560	540	320	230	210	370	4310	2730	6330	4330	1800
29	600	560	540	300	---	210	420	3330	2140	4860	3960	1790
30	600	560	540	300	---	210	480	2720	1770	3860	3680	1760
31	600	---	540	300	---	210	---	2860	---	3270	3440	---
TOTAL	58470	17300	17040	13760	7240	6710	7150	96610	106110	116810	129010	67910
MEAN	1886	577	550	444	259	216	238	3116	3537	3768	4162	2264
MAX	3770	600	560	540	300	230	480	5200	15500	16000	31400	3250
MIN	600	560	540	300	230	210	200	560	1260	1240	1410	1760
CFSM	.87	.27	.25	.21	.12	.10	.11	1.44	1.63	1.74	1.92	1.04
IN.	1.00	.30	.29	.24	.12	.12	.12	1.66	1.82	2.00	2.21	1.16
AC-FT	116000	34310	33800	27290	14360	13310	14180	191600	210500	231700	255900	134700

CAL YR 1985 TOTAL 839210 MEAN 2299 MAX 17900 MIN 250 CFSM 1.06 IN 14.39 AC-FT 1665000
WTR YR 1986 TOTAL 644120 MEAN 1765 MAX 31400 MIN 200 CFSM .81 IN 11.04 AC-FT 1278000

15485500 TANANA RIVER AT FAIRBANKS

LOCATION.--Lat 64°47'34", long 147°50'20", in NE¼ SW¼ SW¼ sec.25, T.1 S., R.2 W., Hydrologic Unit 19030004, on right bank at the end Groin No. 1 on Corps of Engineers flood-protection levee, 1.0 mi south of Fairbanks International Airport, and 1.0 mi upstream from Chena River.

DRAINAGE AREA.--Undefined. Part of river flows through Salachaket Slough and is ungaged.

PERIOD OF RECORD.--June 1973 to current year.

GAGE.--Water-stage recorder. Datum of gage is 400.00 ft above National Geodetic Vertical Datum of 1929. (U.S. Army Corps of Engineers TBM). Prior to Sept. 14, 1973, nonrecording gage, and Sept. 14, 1973 to June 14, 1985, water-stage recorder, at site 2.8 mi upstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 5 to May 13, May 15 to June 17, July 2-8, and Sept. 14-30. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--13 years, 19,480 ft³/s, 14,130,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 96,400 ft³/s, July 22, 1986, gage height, 25.67 ft; minimum daily, 3,100 ft³/s, Feb. 14 to Mar. 31, 1974.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 16, 1967 reached a stage of 34.4 ft, from floodmarks at site then in use: discharge, about 125,000 ft³/s, contained in reports of the Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 96,400 ft³/s, July 22, gage height, 25.67 ft; minimum daily, 5,700 ft³/s, Apr. 6-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	24900	12000	8800	7400	6800	6000	5800	12000	22000	36200	50300	29100
2	23800	12000	8800	7400	6800	6000	5800	14000	27000	38000	47000	28400
3	22700	12000	8600	7400	6800	6000	5800	17000	31000	42000	44900	28200
4	22100	12000	8600	7400	6800	6000	5800	20000	28000	45000	44400	27400
5	21000	12000	8600	7400	6800	6000	5800	26000	25000	50000	44700	26000
6	21000	11000	8600	7400	6600	6000	5700	28000	25000	54000	43900	24500
7	20000	11000	8400	7400	6600	6000	5700	27000	28000	60000	41000	23400
8	20000	11000	8400	7400	6600	6000	5700	26000	30000	66000	38300	22800
9	19000	11000	8400	7400	6600	6000	5700	32000	31000	69000	37500	22600
10	18000	11000	8400	7400	6600	6000	5700	26000	30000	65100	38100	22100
11	18000	11000	8200	7200	6400	6000	5700	21000	28000	62900	38400	22000
12	17000	11000	8200	7200	6400	6000	5700	18000	26000	66000	38900	21000
13	17000	10000	8200	7200	6400	6000	5700	16000	26000	63200	39000	20000
14	16000	10000	8000	7200	6400	6000	5700	14800	27000	63300	37500	18000
15	16000	10000	8000	7200	6400	6000	5700	15000	27000	61700	34300	18000
16	16000	10000	8000	7200	6400	6000	5700	15000	28000	58800	32200	20000
17	15000	10000	8000	7200	6400	6000	5700	15000	29000	56800	30900	21000
18	15000	10000	8000	7000	6400	6000	5700	15000	29800	54500	29700	23000
19	15000	10000	8000	7000	6400	6000	5700	15000	30900	58300	28500	22000
20	15000	10000	8000	7000	6400	6000	5700	15000	34400	63700	27700	20000
21	14000	9600	7800	7000	6200	6000	5800	16000	38000	75600	28200	22000
22	14000	9600	7800	7000	6200	6000	6000	16000	36900	92400	33200	26000
23	14000	9600	7800	7000	6200	6000	6200	17000	38800	88800	52900	25000
24	14000	9600	7800	7000	6200	6000	6800	18000	47400	80000	56500	22000
25	14000	9600	7800	7000	6200	6000	7000	19000	55500	75600	42300	20000
26	13000	9200	7600	6800	6200	6000	7400	20000	54100	71000	35000	19000
27	13000	9200	7600	6800	6200	6000	8000	21000	42200	67100	32900	18000
28	13000	9200	7600	6800	6200	6000	8600	20000	35800	64900	32500	18000
29	13000	9200	7600	6800	---	6000	9200	19000	34500	59900	32400	17000
30	12000	9200	7600	6800	---	6000	10000	18000	34500	55700	31800	17000
31	12000	---	7600	6800	---	6000	---	19000	---	53000	30600	---
TOTAL	518500	311000	250800	221200	180600	186000	189500	590800	980800	1918500	1175500	663500
MEAN	16730	10370	8090	7135	6450	6000	6317	19060	32690	61890	37920	22120
MAX	24900	12000	8800	7400	6800	6000	10000	32000	55500	92400	56500	29100
MIN	12000	9200	7600	6800	6200	6000	5700	12000	22000	36200	27700	17000
AC-FT	1028000	616900	497500	438800	358200	368900	375900	1172000	1945000	3805000	2332000	1316000

CAL YR 1985 TOTAL 8421400 MEAN 23070 MAX 75800 MIN 4800 AC-FT 16700000
WTR YR 1986 TOTAL 7186700 MEAN 19690 MAX 92400 MIN 5700 AC-FT 14250000

15493000 CHENA RIVER NEAR TWO RIVERS

LOCATION.--Lat 64°53'55", long 146°24'42", in SW¼ sec.19, T.1 N., R.7 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on downstream side of bridge near midspan at mile 37.9 on the Chena Hot Springs Highway, 12.5 mi upstream from South Fork Chena River, 20 mi east of Two Rivers, and 39 mi east of Fairbanks.

DRAINAGE AREA.--941 mi².

PERIOD OF RECORD.--October 1967 to current year.

GAGE.--Water-stage recorder. Datum of gage is 700.00 ft above National Geodetic Vertical Datum of 1929 (Alaska Department of Highways TBM).

REMARKS.--Estimated daily discharges: Oct. 18 to May 13, and July 15-16. Records good except for estimated daily discharges, which are poor. NOAA satellite telemetry at station.

AVERAGE DISCHARGE.--19 years, 682 ft³/s, 9.84 in/yr, 494,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 16,800 ft³/s, May 12, 1975, gage height, 21.05 ft; minimum daily, 20 ft³/s, Feb. 6 to Mar. 12, 1970.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of Aug. 13, 1967 reached a stage of 26.6 ft, from floodmarks, discharge not determined.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 14,900 ft³/s, Aug. 22, gage height, 20.71 ft; minimum daily, 60 ft³/s, Mar. 16 to Apr. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1940	620	380	230	90	70	60	330	983	854	1530	1780
2	1810	600	380	220	90	70	60	400	2240	985	1430	1690
3	1700	600	360	210	90	70	60	500	1600	790	1310	1640
4	1600	580	360	210	90	70	60	600	1090	702	1190	1580
5	1510	560	360	200	90	70	60	700	879	648	1110	1520
6	1440	560	360	190	90	70	60	900	868	582	1080	1460
7	1410	540	360	180	90	70	60	1200	827	540	1030	1420
8	1370	540	360	170	80	70	60	1500	790	594	975	1390
9	1410	520	340	160	80	70	60	1600	708	672	936	1460
10	1570	500	340	160	80	70	60	1600	1190	648	895	1580
11	1540	500	340	150	80	70	60	1300	2000	701	865	1550
12	1420	480	340	150	80	70	60	1100	2210	705	860	1480
13	1250	480	340	140	80	70	60	900	1450	624	856	1430
14	1210	480	320	140	80	70	60	741	1020	582	877	1380
15	1130	460	320	130	80	70	60	727	795	540	864	1340
16	1060	460	320	130	80	60	70	862	714	500	838	1310
17	1030	460	320	130	80	60	70	987	684	463	819	1330
18	960	440	320	120	80	60	80	987	678	481	802	1330
19	920	440	320	120	80	60	80	1240	681	576	821	1330
20	880	440	320	120	80	60	90	1410	704	3950	873	1340
21	860	420	300	120	70	60	100	1280	697	8100	3370	1440
22	820	420	300	120	70	60	110	1230	1010	4420	12100	1510
23	800	420	290	110	70	60	120	1190	2000	2840	5840	1450
24	780	400	290	110	70	60	130	1110	6150	2070	3870	1390
25	760	400	280	110	70	60	150	1090	4670	1690	3120	1310
26	740	400	270	110	70	60	170	1110	2120	1660	2680	1210
27	700	400	270	100	70	60	190	1260	1330	3520	2410	1200
28	680	380	260	100	70	60	210	996	996	3370	2230	1190
29	680	380	250	100	---	60	250	806	822	2370	2110	1150
30	660	380	250	100	---	60	290	755	754	1860	2000	1130
31	640	---	240	100	---	60	---	821	---	1630	1880	---
TOTAL	35280	14260	9860	4440	2230	2010	3010	31232	42660	49667	61571	42320
MEAN	1138	475	318	143	79.6	64.8	100	1007	1422	1602	1986	1411
MAX	1940	620	380	230	90	70	290	1600	6150	8100	12100	1780
MIN	640	380	240	100	70	60	60	330	678	463	802	1130
CFSM	1.21	.51	.34	.15	.09	.07	.11	1.07	1.51	1.70	2.11	1.50
IN.	1.39	.56	.39	.18	.09	.08	.12	1.23	1.69	1.96	2.43	1.67
AC-FT	69980	28280	19560	8810	4420	3990	5970	61950	84620	98510	122100	83940

CAL YR 1985 TOTAL 370112 MEAN 1014 MAX 8080 MIN 110 CFSM 1.08 IN 14.63 AC-FT 734100
WTR YR 1986 TOTAL 298540 MEAN 818 MAX 12100 MIN 60 CFSM .87 IN 11.80 AC-FT 592200

15493700 CHENA RIVER BELOW MOOSE CREEK DAM

LOCATION.--Lat 64°48'03", long 147°13'40", in SE¼NW¼ sec.30, T.1 S., R.3 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on left bank just downstream from left seepage ditch, 1.4 mi upstream from Potlatch Creek, 3.1 mi downstream from Moose Creek Dam, 5.0 mi northeast of North Pole, and 14.7 mi east of Fairbanks.

DRAINAGE AREA.--1,430 mi².

PERIOD OF RECORD.--August 1979 to current year. Records for May 1972 to September 1980 at site 1.8 mi upstream published as "near North Pole" (station 15493500), may not be equivalent owing to ground-water inflow and seepage through the dam.

GAGE.--Water-stage recorder. Elevation of gage is 490 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 19 to May 9. Records fair except for estimated daily discharges, which are poor. Higher flows were regulated by Moose Creek Dam, June 24-27, July 21-24, and Aug. 22-28. Regulation during high flow periods began July 9, 1981. Corps of Engineers meteor-burst system telemetry at station.

AVERAGE DISCHARGE.--7 years, 963 ft³/s, 9.15 in/yr, 697,700 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 8,640 ft³/s, Aug. 25, 1986, gage height, 44.64 ft; minimum daily, 78 ft³/s, Mar. 16 to Apr. 12, 1983.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,640 ft³/s, Aug. 25, gage height, 44.64 ft; minimum daily, 80 ft³/s, Mar. 20 to Apr. 12.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	2900	940	640	500	140	90	80	420	1150	1200	2480	2880
2	2760	900	620	480	130	88	80	500	1450	1260	2290	2600
3	2610	880	620	480	130	88	80	640	2380	1380	2100	2280
4	2480	860	620	460	130	88	80	800	1850	1220	1880	2110
5	2350	860	620	440	130	88	80	1000	1440	1080	1700	1970
6	2250	840	600	440	120	86	80	1200	1230	985	1550	1850
7	2140	820	600	420	120	86	80	1400	1170	892	1450	1730
8	2090	800	600	400	120	86	80	1600	1110	887	1360	1650
9	2030	800	600	400	120	86	80	1800	1070	891	1280	1590
10	2170	780	600	380	120	84	80	1820	1000	922	1210	1640
11	2430	780	600	360	110	84	80	1840	1320	884	1140	1720
12	2430	760	600	360	110	84	80	1750	2260	911	1090	1660
13	2190	740	580	340	110	84	82	1630	2360	906	1060	1590
14	1900	740	580	320	110	82	84	1390	1790	874	1040	1520
15	1840	740	580	300	110	82	86	1170	1380	862	1040	1450
16	1670	720	580	300	100	82	88	1150	1120	816	1030	1400
17	1550	720	580	280	100	82	92	1290	967	748	995	1370
18	1460	700	580	280	100	82	98	1390	850	714	969	1360
19	1400	700	580	260	100	82	100	1430	770	980	954	1350
20	1300	680	580	240	100	80	110	1830	782	2150	971	1350
21	1300	680	580	220	96	80	120	1970	826	4940	1390	1350
22	1200	680	560	220	96	80	130	1890	841	5270	3730	1480
23	1200	660	560	200	94	80	140	1820	1160	4940	5450	1510
24	1200	660	560	180	94	80	150	1680	3040	5080	8370	1450
25	1100	660	560	180	92	80	170	1560	5100	3700	8440	1380
26	1100	660	560	170	92	80	190	1510	4080	3230	8010	1300
27	1100	640	540	160	90	80	220	1540	3410	3420	4910	1220
28	1000	640	540	160	90	80	250	1630	2560	4580	3990	1200
29	1000	640	520	150	---	80	290	1360	1780	4080	3600	1170
30	960	640	520	150	---	80	340	1170	1390	3350	3320	1130
31	960	---	500	140	---	80	---	1100	---	2780	3100	---
TOTAL	54070	22320	17960	9370	3054	2574	3700	43280	51636	65932	81899	48260
MEAN	1744	744	579	302	109	83.0	123	1396	1721	2127	2642	1609
MAX	2900	940	640	500	140	90	340	1970	5100	5270	8440	2880
MIN	960	640	500	140	90	80	80	420	770	714	954	1130
CFSM	1.22	.52	.41	.21	.08	.06	.09	.98	1.20	1.49	1.85	1.13
IN.	1.41	.58	.47	.24	.08	.07	.10	1.13	1.34	1.72	2.13	1.26
AC-FT	107200	44270	35620	18590	6060	5110	7340	85850	102400	130800	162400	95720

CAL YR 1985 TOTAL 484989 MEAN 1329 MAX 7850 MIN 150 CFSM .93 IN 12.62 AC-FT 962000
WTR YR 1986 TOTAL 404055 MEAN 1107 MAX 8440 MIN 80 CFSM .77 IN 10.51 AC-FT 801400

15511000 LITTLE CHENA RIVER NEAR FAIRBANKS

LOCATION.--Lat 64°53'10", long 147°14'50", in SW¼NE¼ sec.25, T.1 N., R.2 E., Fairbanks North Star Borough, Hydrologic Unit 19030004, on downstream side of left bridge abutment at mi 11.9 on Chena Hot Springs Highway, 22.5 mi upstream from mouth, and 14 mi northeast of Fairbanks.

DRAINAGE AREA.--372 mi^2.

PERIOD OF RECORD.--August 1966 to current year.

GAGE.--Water-stage recorder. Datum of gage is 458.79 ft above National Geodetic Vertical Datum of 1929.

REMARKS.--Estimated daily discharges: Oct. 14 to May 15. Records fair except for estimated daily discharges, which are poor. NOAA satellite telemetry at station.

AVERAGE DISCHARGE.--20 years, 211 ft^3/s, 7.70 in/yr, 152,900 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 17,000 ft^3/s, Aug. 13, 1967, gage height, 31.95 ft, from rating curve extended above 3,000 ft^3/s on basis of contracted-opening determination of peak flow; no flow, Mar. 11 to Apr. 15, 1967.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 2,670 ft^3/s, Aug. 23, gage height, 24.83 ft; minimum daily, 14 ft^3/s, Mar. 16 to Apr. 14.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	617	300	200	140	42	16	14	100	234	159	393	488
2	596	300	200	130	38	16	14	120	344	222	388	455
3	575	290	200	130	36	16	14	150	388	219	349	430
4	556	290	200	130	34	16	14	200	282	178	304	422
5	539	280	190	120	32	16	14	280	228	159	285	397
6	528	280	190	120	30	16	14	340	209	142	298	377
7	522	270	190	120	30	16	14	390	192	127	294	361
8	521	270	190	110	28	16	14	420	231	122	270	349
9	525	260	190	110	28	16	14	440	286	117	252	359
10	564	260	180	110	26	16	14	450	293	116	237	382
11	557	260	180	100	26	16	14	450	624	114	224	369
12	535	250	180	98	24	16	14	430	579	111	214	353
13	503	250	180	94	24	16	14	420	446	110	206	339
14	490	240	180	90	22	16	14	410	320	133	202	326
15	480	240	180	88	22	16	15	400	247	153	196	311
16	460	240	180	84	22	14	16	390	208	140	194	302
17	440	230	180	82	20	14	18	381	182	126	191	305
18	430	230	180	78	20	14	20	319	163	124	190	324
19	420	230	170	74	20	14	22	283	153	243	199	366
20	410	220	170	72	20	14	24	306	145	849	214	363
21	400	220	170	70	20	14	26	311	137	1890	780	391
22	390	220	170	66	18	14	30	335	142	1150	2330	431
23	380	220	170	64	18	14	34	327	160	704	2230	409
24	370	220	160	62	18	14	38	307	259	523	1210	379
25	360	210	160	60	18	14	42	278	509	428	925	346
26	350	210	160	56	18	14	48	277	306	396	779	298
27	340	210	160	54	18	14	54	304	219	746	685	297
28	330	210	150	52	18	14	60	287	182	737	628	300
29	330	200	150	48	---	14	70	244	159	554	618	284
30	320	200	150	46	---	14	80	226	147	464	575	277
31	310	---	140	44	---	14	---	218	---	408	523	---
TOTAL	14148	7310	5450	2702	690	464	793	9793	7974	11664	16383	10790
MEAN	456	244	176	87.2	24.6	15.0	26.4	316	266	376	528	360
MAX	617	300	200	140	42	16	80	450	624	1890	2330	488
MIN	310	200	140	44	18	14	14	100	137	110	190	277
CFSM	1.23	.66	.47	.23	.07	.04	.07	.85	.72	1.01	1.42	.97
IN.	1.41	.73	.54	.27	.07	.05	.08	.98	.80	1.17	1.64	1.08
AC-FT	28060	14500	10810	5360	1370	920	1570	19420	15820	23140	32500	21400

CAL YR 1985 TOTAL 114879 MEAN 315 MAX 1970 MIN 54 CFSM .85 IN 11.49 AC-FT 227900
WTR YR 1986 TOTAL 88161 MEAN 242 MAX 2330 MIN 14 CFSM .65 IN 8.82 AC-FT 174900

15514000 CHENA RIVER AT FAIRBANKS

LOCATION.--Lat 64°50'45", long 147°42'04", in NW¼ sec. 11, T. 1 S., R. 1 W., Fairbanks North Star Borough, Hydrologic Unit 19030004, on right bank 100 ft downstream from Steese Highway Bridge, 800 ft upstream from Wendell Street bridge, 0.3 mi upstream from Noyes Slough, 11 mi upstream from mouth, and 11 mi downstream from Chena Slough.

DRAINAGE AREA.--1,980 mi², approximately.

PERIOD OF RECORD.--July 1947 to September 1948 (no winter records), October 1948 to current year.

GAGE.--Water-stage recorder and nonrecording supplementary gage. Datum of gage is 422.92 ft above National Geodetic Vertical Datum of 1929. See WSP 1936 and 2136 for history of changes prior to Apr. 27, 1968.

REMARKS.--Estimated daily discharges: Oct. 18 to May 7, May 21-26, and June 5. Records good except for estimated daily discharges, which are poor. Flows on June 24-27, July 21-24, and Aug. 22-28 regulated by Moose Creek Dam 31.8 mi upstream. Flow first regulated July 9-23, 1981.

AVERAGE DISCHARGE.--38 years (water years 1949-1986), 1,394 ft³/s, 9.56 in/yr, 1,010,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 74,400 ft³/s, Aug. 15, 1967, gage height, 18.82 ft, site then in use; minimum not determined, monthly means of 120 ft³/s published for February 1953 and March 1958.

EXTREMES OUTSIDE PERIOD OF RECORD--Outstanding floods in early May 1905 and 1911 reached stages of about 17 ft and 16 ft, respectively, present site and datum, probably some backwater from ice, from profile of floodmarks in a report by Corps of Engineers. Flood of late August 1930 reached a stage of 16.8 ft, present site and datum, from information in above report. Flood of May 11-14, 1937 reached a stage of 15.7 ft, present datum from floodmarks at Cushman Street bridge, 16.5 ft, present site and datum, from above report, backwater from ice. Prior to construction of a dike in 1941, it was possible for flood waters from the Tanana River in Piledriver Slough to be diverted to the Chena River through Chena Slough.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 8,330 ft³/s, Aug. 24, gage height, 7.92 ft; minimum daily, 290 ft³/s, Mar. 21 to Apr. 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	3720	1200	740	700	350	330	290	520	1510	1560	2940	3390
2	3550	1200	740	700	350	330	290	560	1580	1480	2710	3120
3	3370	1100	740	680	350	330	290	620	2270	1620	2530	2790
4	3180	1100	720	680	350	320	290	700	2280	1600	2350	2570
5	3050	1100	720	680	350	320	290	840	1800	1440	2180	2440
6	2930	1100	720	660	350	320	290	1000	1650	1330	2040	2320
7	2830	1000	720	660	350	320	290	1400	1570	1230	1930	2220
8	2760	1000	700	640	350	310	290	1930	1510	1160	1820	2150
9	2720	1000	700	640	350	310	290	1910	1470	1140	1740	2100
10	2720	1000	700	620	350	310	290	2050	1460	1140	1660	2070
11	2920	960	700	600	340	310	290	2250	1520	1140	1590	2080
12	3000	940	700	580	340	300	290	2180	2290	1120	1520	2100
13	2900	920	700	560	340	300	290	2180	2650	1120	1480	2080
14	2590	900	700	540	340	300	290	2050	2320	1130	1440	2000
15	2460	900	700	520	340	300	290	1790	1890	1120	1410	1930
16	2390	880	700	500	340	300	300	1680	1590	1120	1400	1830
17	2160	860	700	480	340	300	300	1730	1390	1060	1370	1840
18	2000	860	700	460	340	300	300	1900	1240	988	1340	1830
19	1900	840	700	440	340	300	300	1920	1120	1050	1320	1810
20	1800	840	700	440	340	300	300	2120	1040	1640	1310	1810
21	1800	820	700	420	340	290	310	2300	1030	4910	1430	1810
22	1700	820	700	400	340	290	310	2200	1040	6970	4020	1830
23	1600	800	700	400	340	290	330	2100	1150	5920	5920	1920
24	1500	800	700	380	340	290	340	2000	1750	6190	8140	1920
25	1500	780	700	380	340	290	350	1900	4440	4780	8320	1900
26	1400	780	700	370	340	290	370	1900	4640	3910	8280	1800
27	1400	780	700	360	330	290	390	1950	3770	3620	6980	1720
28	1300	760	700	350	330	290	410	2000	2960	4950	5230	1670
29	1300	760	700	350	---	290	440	1910	2210	5250	4450	1640
30	1300	760	700	350	---	290	480	1690	1780	4230	4030	1610
31	1200	---	700	350	---	290	---	1560	---	3380	3690	---
TOTAL	70950	27560	21900	15890	9600	9400	9580	52840	58920	79298	96570	62350
MEAN	2289	919	706	513	343	303	319	1705	1964	2558	3115	2078
MAX	3720	1200	740	700	350	330	480	2300	4640	6970	8320	3390
MIN	1200	760	700	350	330	290	290	520	1030	988	1310	1610
CFSM	1.16	.46	.36	.26	.17	.15	.16	.86	.99	1.29	1.57	1.05
IN.	1.33	.52	.41	.30	.18	.18	.18	.99	1.11	1.49	1.81	1.17
AC-FT	140700	54670	43440	31520	19040	18640	19000	104800	116900	157300	191500	123700

CAL YR 1985 TOTAL 642330 MEAN 1760 MAX 8600 MIN 310 CFSM .89 IN 12.07 AC-FT 1274000
WTR YR 1986 TOTAL 514858 MEAN 1411 MAX 8320 MIN 290 CFSM .71 IN 9.67 AC-FT 1021000

15515500 TANANA RIVER AT NENANA
(National Stream-Quality Accounting Network Station)

LOCATION.--Lat 64°33'55", long 149°05'30", in SE¼ sec.14, T.4 S., R.8 W., Hydrologic Unit 19030004, on left bank on east end of Alaska Railroad dock in Nenana and 0.3 mi upstream from Nenana River.

DRAINAGE AREA.--25,600 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--May 1962 to current year.

REVISED RECORDS.--WSP 2136: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 338.50 ft above National Geodetic Vertical Datum of 1929. Prior to Mar. 10, 1965, on right bank 280 ft downstream from railroad bridge 0.5 mi upstream at present datum. Mar. 10, 1965 to Mar 23, 1968, nonrecording gage on railroad bridge 0.5 mi upstream at present datum.

REMARKS.--Estimated daily discharges: Oct. 5-9, Oct. 16 to May 11, and Sept. 6-19, 26-30. Records good except for estimated daily discharges, which are poor. NOAA Satellite telemetry at station.

AVERAGE DISCHARGE.--24 years, 23,860 ft³/s, 12.66 in/yr, 17,290,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 186,000 ft³/s, Aug. 18, 1967, gage height, 18.90 ft, site then in use; minimum daily, 4,000 ft³/s, Mar. 6-20, 1974.

EXTREMES OUTSIDE PEROD OF RECORD.--Flood of May 1948 reached a stage of 15.9 ft, discharge, about 135,000 ft³/s, contained in reports of Corps of Engineers.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 99,600 ft³/s, July 23, gage height, 12.96 ft; minimum daily, about 7,000 ft³/s, Apr. 11-20.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	36200	17000	12000	9600	8400	7800	7200	13000	34700	45900	61000	39700
2	35300	17000	12000	9600	8400	7800	7200	15000	38900	48900	57400	38000
3	34000	16000	12000	9600	8400	7800	7200	20000	42900	53000	54200	37100
4	33300	16000	12000	9600	8400	7800	7200	27000	40200	56800	53300	36300
5	33000	16000	11000	9600	8400	7800	7200	35000	36100	60500	53500	35000
6	32000	16000	11000	9600	8400	7800	7200	34000	34700	62400	53000	34000
7	31000	16000	11000	9600	8400	7600	7200	33000	36000	64300	49600	33000
8	31000	15000	11000	9600	8400	7600	7200	33000	37200	66100	46100	32000
9	30000	15000	11000	9200	8400	7600	7200	36000	38200	67800	44500	32000
10	28700	15000	11000	9200	8400	7600	7200	38000	38500	66600	44600	31000
11	28200	15000	11000	9200	8200	7600	7000	36000	37900	62900	45500	30000
12	26900	14000	11000	9200	8200	7600	7000	33800	35000	62600	46000	29000
13	25400	14000	11000	9200	8200	7600	7000	28700	35000	62800	46700	28000
14	24100	14000	11000	9000	8200	7600	7000	25000	36100	63500	45900	28000
15	23500	14000	11000	9000	8200	7600	7000	25300	37200	63300	43100	27000
16	23000	14000	11000	9000	8200	7400	7000	26900	38400	60600	39900	27000
17	22000	14000	11000	9000	8200	7400	7000	27200	39500	57800	38100	27000
18	22000	13000	11000	9000	8000	7400	7000	28600	41700	56100	37200	27000
19	21000	13000	11000	8800	8000	7400	7000	28900	45000	56900	35800	28000
20	21000	13000	11000	8800	8000	7400	7000	28400	45600	68400	34800	29300
21	20000	13000	10000	8800	8000	7400	7200	29000	47800	81700	36800	30600
22	20000	13000	10000	8800	8000	7400	7200	29200	47400	94100	45700	32500
23	20000	13000	10000	8800	8000	7400	7400	30000	46700	98200	58900	32900
24	19000	13000	10000	8800	8000	7400	7600	30900	48800	95100	67700	31200
25	19000	13000	10000	8800	8000	7400	7800	31500	55200	87000	58100	30400
26	19000	12000	10000	8600	7800	7200	8200	32800	58700	81200	49600	29000
27	18000	12000	10000	8600	7800	7200	8800	33800	52100	76700	46900	27000
28	18000	12000	10000	8600	7800	7200	9400	33300	46200	73300	45900	25000
29	18000	12000	10000	8600	---	7200	10000	33400	44800	70900	45000	24000
30	17000	12000	10000	8600	---	7200	11000	33100	44800	66100	43700	23000
31	17000	---	10000	8600	---	7200	---	33300	---	63700	41900	---
TOTAL	766600	422000	334000	281000	228800	232400	226600	923100	1261200	2095200	1470400	914000
MEAN	24730	14070	10770	9065	8171	7497	7553	29780	42040	67590	47430	30470
MAX	36200	17000	12000	9600	8400	7800	11000	38000	58700	98200	67700	39700
MIN	17000	12000	10000	8600	7800	7200	7000	13000	34700	45900	34800	23000
CFSM	.97	.55	.42	.35	.32	.29	.30	1.16	1.64	2.64	1.85	1.19
IN.	1.11	.61	.49	.41	.33	.34	.33	1.34	1.83	3.04	2.14	1.33
AC-FT	1521000	837000	662500	557400	453800	461000	449500	1831000	2502000	4156000	2917000	1813000

CAL YR 1985 TOTAL 10571600 MEAN 28960 MAX 83900 MIN 6200 CFSM 1.13 IN 15.36 AC-FT 20970000
WTR YR 1986 TOTAL 9155300 MEAN 25080 MAX 98200 MIN 7000 CFSM .98 IN 13.30 AC-FT 18160000

15515500 TANANA RIVER AT NENANA--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-56, 1963-64, 1966-75, and 1978 to current year

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)
OCT 10...	1400	28200	237	7.80	7.0	3.0	38	762	12.3	91	K11
JAN 22...	1230	8880	296	7.00	-17.0	0.0	3.5	747	9.1	64	K0
MAR 26...	1300	7320	301	6.60	-8.0	0.0	2.6	747	10.5	73	K0
JUL 10...	1300	68900	200	7.90	21.0	13.0	940	757	9.9	95	K180
SEP 03...	1330	36100	228	7.10	13.0	10.0	140	770	11.4	100	K18

DATE	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)
OCT 10...	K12	120	25	35	8.0	3.5	1.6	96	96	116
JAN 22...	K4	160	26	46	9.8	4.2	2.3	131	130	158
MAR 26...	K0	150	25	45	9.3	4.5	2.5	126	126	154
JUL 10...	K240	89	17	26	5.7	3.4	2.6	72	72	88
SEP 03...	K22	100	17	30	6.9	3.6	2.0	87	86	105

DATE	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)
OCT 10...	31	1.1	0.20	11	155	150	--	<0.010	0.290	0.060
JAN 22...	27	1.5	0.20	16	188	190	--	<0.010	0.210	0.090
MAR 26...	26	1.6	0.20	14	197	180	--	<0.010	0.180	0.080
JUL 10...	29	1.7	0.10	6.5	120	120	0.100	0.010	0.110	0.041
SEP 03...	30	1.5	0.10	8.8	151	130	--	<0.010	0.140	0.030

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)
OCT 10...	0.040	0.24	0.30	0.190	<0.010	<0.010	30	1	41	<0.5
JAN 22...	0.090	0.21	0.30	0.030	0.010	<0.010	<10	<1	53	<0.5
MAR 26...	0.140	0.22	0.30	0.030	<0.010	<0.010	--	--	--	--
JUL 10...	0.070	0.46	0.50	0.340	0.010	0.010	140	1	39	<0.5
SEP 03...	0.030	0.27	0.30	0.160	0.021	<0.010	--	--	--	--

K NON-IDEAL COLONY COUNT

15515500 TANANA RIVER AT NENANA--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)
OCT 10...	< 1	< 1	< 3	6	120	5	6	49	0.10	--
JAN 22...	< 1	< 1	< 3	3	44	< 1	5	110	--	< 0.1
MAR 26...	--	--	--	--	--	--	--	--	--	--
JUL 10...	< 1	< 1	< 3	5	130	< 5	6	4	--	0.3
SEP 03...	--	--	--	--	--	--	--	--	--	< 0.1

DATE	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	NICKEL, DIS-SOLVED (UG/L AS NI) (01065)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 10...	< 10	3	< 1	< 1	150	< 6	20	510	38800	33
JAN 22...	< 10	< 1	< 1	< 1	210	< 6	23	24	575	65
MAR 26...	--	--	--	--	--	--	--	42	830	37
JUL 10...	< 10	2	< 1	< 1	120	< 6	3	2990	556000	87
SEP 03...	--	--	--	--	--	--	--	996	97100	49

15518080 LIGNITE CREEK ABOVE MOUTH NEAR HEALY

LOCATION.--Lat 63°54'17", long 148°59'01", in SE¼ NE¼ sec.6, T.11 S., R.7 W., Hydrologic Unit 19030004, on left bank 100 ft upstream from bridge on access road to Usibelli Coal Mine office, 0.5 mi upstream from mouth, and 3.5 mi north of Healy.

DRAINAGE AREA.--48.1 mi².

PERIOD OF RECORD.--May 1985 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 1,300 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 6 to May 21, May 24 to June 23, July 20-22, and Aug. 22 to Sept. 30. Records poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum recorded discharge estimated as 2,400 ft³/s, Aug. 21, 1986, gage height, 11.05 ft, from rating curve extended above 280 ft³/s on basis of surface-float measurement at gage height, 10.0 ft (discharge, 1,310 ft³/s), and velocity-area study; no flow, Feb. 1 to Apr. 30, 1986.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, about 2,400 ft³/s, Aug. 21, gage height was at least as high as 11.05 ft, from rating curve extended as explained above; no flow, Feb. 1 to Apr. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	62	20	10	2.0	.00	.00	.00	1.0	30	34	52	42
2	57	20	9.0	2.0	.00	.00	.00	1.0	320	39	48	41
3	59	20	9.0	2.0	.00	.00	.00	1.0	220	28	46	41
4	52	20	9.0	2.0	.00	.00	.00	1.0	90	26	46	41
5	42	20	8.0	1.0	.00	.00	.00	1.0	45	25	45	40
6	40	20	8.0	1.0	.00	.00	.00	2.0	40	29	44	40
7	40	20	8.0	1.0	.00	.00	.00	3.0	30	35	43	45
8	40	20	7.0	1.0	.00	.00	.00	5.0	30	27	43	120
9	35	20	7.0	1.0	.00	.00	.00	7.0	24	26	43	70
10	35	20	6.0	1.0	.00	.00	.00	10	30	24	43	60
11	30	20	6.0	1.0	.00	.00	.00	20	70	22	43	60
12	30	20	6.0	1.0	.00	.00	.00	30	80	22	43	50
13	30	15	6.0	1.0	.00	.00	.00	36	100	34	58	40
14	30	15	5.0	1.0	.00	.00	.00	50	70	28	50	40
15	30	15	5.0	1.0	.00	.00	.00	70	50	24	48	45
16	25	15	5.0	1.0	.00	.00	.00	90	40	23	48	45
17	25	15	5.0	1.0	.00	.00	.00	110	35	22	46	48
18	25	15	4.0	1.0	.00	.00	.00	120	30	22	44	50
19	25	15	4.0	1.0	.00	.00	.00	120	30	281	64	60
20	25	15	4.0	1.0	.00	.00	.00	110	30	635	73	100
21	25	15	4.0	.50	.00	.00	.00	100	35	140	829	150
22	25	15	3.0	.50	.00	.00	.00	98	50	90	771	110
23	25	15	3.0	.50	.00	.00	.00	86	60	59	45	90
24	25	15	3.0	.50	.00	.00	.00	65	41	49	45	60
25	20	15	3.0	.50	.00	.00	.00	50	36	47	56	55
26	20	10	3.0	.50	.00	.00	.00	30	33	162	56	50
27	20	10	3.0	.50	.00	.00	.00	24	32	155	52	50
28	20	10	2.0	.50	.00	.00	.00	21	32	93	47	50
29	20	10	2.0	.50	---	.00	.00	20	31	71	45	45
30	20	10	2.0	.50	---	.00	.00	20	35	60	43	45
31	20	---	2.0	.50	---	.00	---	24	---	55	42	---
TOTAL	977	485	161.0	29.50	.00	.00	.00	1326.0	1779	2387	3001	1783
MEAN	31.5	16.2	5.19	.95	.000	.000	.000	42.8	59.3	77.0	96.8	59.4
MAX	62	20	10	2.0	.00	.00	.00	120	320	635	829	150
MIN	20	10	2.0	.50	.00	.00	.00	1.0	24	22	42	40
CFSM	.66	.34	.11	.02	.000	.000	.000	.89	1.23	1.60	2.01	1.24
IN.	.76	.38	.12	.02	.00	.00	.00	1.03	1.38	1.85	2.32	1.38
AC-FT	1940	962	319	59	.00	.00	.00	2630	3530	4730	5950	3540

WTR YR 1986 TOTAL 11928.50 MEAN 32.7 MAX 829 MIN .00 CFSM .68 IN 9.23 AC-FT 23660

15518080 LIGNITE CREEK ABOVE MOUTH NEAR HEALY--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water year 1980-81, 1986.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)
JUN								
24...	1500	40	16.5	2130	230	19	28	39
JUL								
17...	1600	22	16.0	338	20	18	28	--
23...	1600	57	--	1430	220	27	39	53
AUG								
13...	1330	62	--	3920	656	19	28	40
SEP								
09...	1300	66	--	8700	1550	12	18	25
17...	1310	48	--	1710	222	13	19	26

DATE	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)
JUN							
24...	49	59	69	77	92	100	--
JUL							
17...	50	--	56	62	84	100	--
23...	65	73	79	82	94	100	--
AUG							
13...	52	65	71	76	89	100	--
SEP							
09...	31	37	42	50	72	96	100
17...	34	40	46	54	76	99	100

15564875 MIDDLE FORK KOYUKUK RIVER NEAR WISEMAN

LOCATION.--Lat 67°26'18", long 150°04'30", in SE¼ sec.7, T.30 N., R.11 W., Hydrologic Unit 19030005, near midspan on downstream side of bridge on Dalton Highway, 1.4 mi upstream from Minnie Creek, 1.9 mi downstream from Hammond River, 2.1 mi north of Wiseman and 2.5 mi upstream from Wiseman Creek.

DRAINAGE AREA.--1,200 mi^2, approximately.

PERIOD OF RECORD.--August 1970 to September 1978, October 1983 to current year.

REVISED RECORDS.--WRD AK-84-1: Drainage area.

GAGE.--Water-stage recorder. Datum of gage is 1,189.6 ft above National Geodetic Vertical Datum of 1929 (Alyeska Pipeline Service Company, temporary bench mark). Prior to July 23, 1976, at site 0.3 mi upstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 6 to May 14, June 22 to July 29, and Sept. 26-30. Records fair except for periods of ice effect, Oct. 6-22 and Sept. 26-30, and periods of no gage-height record, Oct. 23 to May 14, and June 22 to July 29, which are poor. Winter low flow may be discontinuous as the flow probably varies significantly along the main stem of the river due to the formation of aufeis in the vicinity of springs. Flow may cease at other points.

AVERAGE DISCHARGE.--11 years (water years 1971-78 and 1984-86), 763 ft^3/s, 8.63 in/yr, 552,800 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 19,100 ft^3/s, May 31, 1977, gage height, 10.66 ft, from rating curve extended above 8,200 ft^3/s on the basis of slope-area measurement at a gage height of 11.1 ft, from floodmarks; no flow, Nov. 16, 1974 to Apr. 24, 1975, Feb. 1 to Apr. 30, 1985, and Mar. 6 to May 1, 1986.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 1968 reached a stage of 13.25 ft at prior site, from floodmarks, discharge, 16,300 ft^3/s from slope-area measurement. The maximum evident flood reached a stage of 15.2 ft at prior site, 11.1 ft, present site, from floodmarks, discharge, about 33,000 ft^3/s from slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,100 ft^3/s, June 7, gage height, 9.32 ft; no flow, Mar. 6 to May 1.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	441	60	20	10	3.0	1.0	.00	.00	5570	1600	1880	3160
2	387	60	20	10	3.0	1.0	.00	1.0	7000	1500	4730	3590
3	320	60	20	10	3.0	1.0	.00	2.0	6670	1400	4380	4840
4	362	60	20	10	3.0	1.0	.00	2.0	5450	1300	2950	4630
5	285	50	20	10	3.0	1.0	.00	2.0	6240	1200	3400	5590
6	250	50	20	10	2.0	.00	.00	3.0	6800	1200	3030	4760
7	220	50	20	10	2.0	.00	.00	4.0	8400	1100	2340	3680
8	200	50	20	10	2.0	.00	.00	6.0	7990	1100	1810	3050
9	180	50	20	10	2.0	.00	.00	9.0	6930	1100	1840	2990
10	170	40	20	10	2.0	.00	.00	15	6230	1000	2140	2670
11	160	40	20	6.0	2.0	.00	.00	30	7290	1000	2280	2500
12	150	40	20	6.0	2.0	.00	.00	50	5390	1000	2170	3260
13	140	40	20	6.0	2.0	.00	.00	100	4410	1000	2900	3850
14	130	40	20	6.0	2.0	.00	.00	300	4020	1100	2730	2950
15	120	40	20	6.0	2.0	.00	.00	830	3780	1200	2190	2560
16	120	40	10	6.0	1.0	.00	.00	1090	3340	1300	1870	2530
17	110	40	10	6.0	1.0	.00	.00	1140	3140	1700	1470	2680
18	110	30	10	6.0	1.0	.00	.00	1100	2770	1800	1300	2690
19	110	30	10	6.0	1.0	.00	.00	836	2330	1800	1190	3080
20	100	30	10	6.0	1.0	.00	.00	675	1860	1800	1090	3410
21	100	30	10	4.0	1.0	.00	.00	783	1780	1600	1180	3800
22	100	30	10	4.0	1.0	.00	.00	978	1800	1400	1260	2730
23	90	30	10	4.0	1.0	.00	.00	1850	1900	1300	1070	1990
24	90	30	10	4.0	1.0	.00	.00	3010	2200	1100	1000	1650
25	80	30	10	4.0	1.0	.00	.00	2900	2700	1000	917	1130
26	80	30	10	4.0	1.0	.00	.00	2310	2800	900	840	960
27	80	30	10	4.0	1.0	.00	.00	2150	2500	900	918	820
28	70	30	10	.0	1.0	.00	.00	2150	2100	900	1220	700
29	70	20	10	4.0	---	.00	.00	2900	1900	900	1560	600
30	70	20	10	4.0	---	.00	.00	3340	1700	938	2630	520
31	60	---	10	4.0	---	.00	---	4040	---	1370	3640	---
TOTAL	4955	1180	460	204.0	48.0	5.00	.00	32606.00	126990	38508	63925	83370
MEAN	160	39.3	14.8	6.58	1.71	.16	.000	1052	4233	1242	2062	2779
MAX	441	60	20	10	3.0	1.0	.00	4040	8400	1800	4730	5590
MIN	60	20	10	4.0	1.0	.00	.00	.00	1700	900	840	520
CFSM	.13	.03	.01	.005	.001	.000	.000	.88	3.53	1.04	1.72	2.32
IN.	.15	.04	.01	.01	.00	.00	.00	1.01	3.94	1.19	1.98	2.58
AC-FT	9830	2340	912	405	95	9.9	.00	64670	251900	76380	126800	165400

CAL YR 1985 TOTAL 288563.00 MEAN 791 MAX 9310 MIN .00 CFSM .66 IN 8.95 AC-FT 572400
WTR YR 1986 TOTAL 352251.00 MEAN 965 MAX 8400 MIN .00 CFSM .80 IN 10.92 AC-FT 698700

15565447 YUKON RIVER AT PILOT STATION
(National stream-quality accounting, and radiochemical networks station)

LOCATION.--Lat 61°56'04", long 162°52'50", in SW¼SE¼ sec.5, T.21 N., R.74 W., Hydrologic Unit 19030006, on right bank 0.2 mi downstream from village of Pilot Station, 2.4 mi downstream from Atchuelinguk River, and 19 mi upstream from Andreafsky River.

DRAINAGE AREA.--321,000 mi², approximately.

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--October 1975 to current year.

REVISED RECORDS.--WDR AK-85-1: 1982

GAGE.--Water-stage recorder. Elevation of gage is 20 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1 to May 27 and June 4-10. Records fair except for periods of no gage-height record, Oct. 1 to May 25 and June 4-10, and period with ice effect, May 26 and 27, which are poor.

AVERAGE DISCHARGE.--11 years, 223,700 ft³/s, 9.46 in/yr, 162,100,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum daily discharge about 1,100,000 ft³/s, June 5-8, 1985, maximum discharge recorded, 1,070,000 ft³/s, June 9, 1985, gage height, 27.50 ft; maximum gage height, 32.7 ft, during June 1-3, 1985 period, from floodmarks, backwater from ice; minimum daily discharge, about 35,000 ft³/s, Feb. 23 to Mar. 27, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 585,000 ft³/s, May 28, gage height, 23.95 ft; minimum daily, about 50,000 ft³/s, Apr. 1 to May 15.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	460000	170000	100000	76000	65000	55000	50000	50000	508000	508000	416000	440000
2	460000	170000	100000	76000	65000	55000	50000	50000	478000	503000	405000	435000
3	460000	170000	100000	76000	65000	55000	50000	50000	454000	500000	398000	432000
4	460000	170000	100000	76000	65000	55000	50000	50000	450000	499000	398000	436000
5	460000	170000	100000	76000	65000	55000	50000	50000	440000	499000	398000	434000
6	400000	170000	100000	76000	65000	55000	50000	50000	430000	499000	394000	429000
7	400000	170000	100000	76000	65000	55000	50000	50000	430000	500000	393000	425000
8	400000	170000	100000	76000	65000	55000	50000	50000	430000	498000	390000	423000
9	400000	170000	100000	76000	65000	55000	50000	50000	440000	494000	389000	427000
10	400000	170000	100000	76000	65000	55000	50000	50000	450000	490000	390000	430000
11	350000	140000	100000	76000	65000	55000	50000	50000	464000	483000	391000	433000
12	350000	140000	100000	76000	65000	55000	50000	50000	471000	475000	388000	432000
13	350000	140000	100000	76000	65000	55000	50000	50000	483000	467000	391000	434000
14	350000	140000	100000	76000	65000	55000	50000	50000	495000	459000	391000	433000
15	350000	140000	100000	76000	65000	55000	50000	50000	506000	452000	392000	429000
16	300000	140000	90000	76000	65000	55000	50000	51000	516000	447000	396000	429000
17	300000	140000	90000	76000	65000	55000	50000	51000	526000	443000	399000	428000
18	300000	140000	90000	76000	65000	55000	50000	54000	532000	439000	404000	427000
19	300000	140000	90000	76000	65000	55000	50000	56000	542000	436000	412000	425000
20	300000	140000	90000	76000	65000	55000	50000	60000	553000	434000	419000	422000
21	240000	120000	90000	76000	65000	55000	50000	75000	557000	431000	428000	425000
22	240000	120000	90000	76000	65000	55000	50000	100000	559000	427000	437000	426000
23	240000	120000	90000	76000	65000	55000	50000	150000	558000	431000	441000	427000
24	240000	120000	90000	76000	65000	55000	50000	200000	554000	435000	444000	430000
25	240000	120000	90000	76000	65000	55000	50000	250000	548000	437000	447000	426000
26	200000	120000	90000	76000	65000	55000	50000	350000	542000	438000	452000	423000
27	200000	120000	90000	76000	65000	55000	50000	517000	536000	438000	456000	420000
28	200000	120000	90000	76000	65000	55000	50000	574000	529000	435000	459000	415000
29	200000	120000	90000	76000	---	55000	50000	570000	520000	432000	457000	413000
30	200000	120000	90000	76000	---	55000	50000	553000	514000	427000	452000	410000
31	200000	---	90000	76000	---	55000	---	532000	---	424000	447000	---
TOTAL	9950000	4300000	2940000	2356000	1820000	1705000	1500000	4893000	15015000	14280000	12874000	12818000
MEAN	321000	143300	94840	76000	65000	55000	50000	157800	500500	460600	415300	427300
MAX	460000	170000	100000	76000	65000	55000	50000	574000	559000	508000	459000	440000
MIN	200000	120000	90000	76000	65000	55000	50000	50000	430000	424000	388000	410000
CFSM	1.00	.45	.30	.24	.20	.17	.16	.49	1.56	1.44	1.29	1.33
IN.	1.15	.50	.34	.27	.21	.20	.17	.57	1.74	1.65	1.49	1.49
AC-FT	19740000	8529000	5831000	4673000	3610000	3382000	2975000	9705000	29780000	28320000	25540000	25420000

CAL YR 1985 TOTAL 93598000 MEAN 256400 MAX 1100000 MIN 40000 CFSM .80 IN 10.85 AC-FT 185700000
WTR YR 1986 TOTAL 84451000 MEAN 231400 MAX 574000 MIN 50000 CFSM .72 IN 9.79 AC-FT 167500000

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1954-56, 1975 to current year.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLE LOC- ATION, CROSS SECTION (FT FM L BANK) (00009)	SAMPLE LOC- ATION, CROSS SECTION (FT FM R BK) (72103)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)
APR									
17...	1435	950	--	319	6.90	0.0	--	--	--
17...	1440	1200	--	319	7.20	0.0	--	--	--
17...	1445	1400	--	318	7.30	0.0	--	--	--
17...	1448	1850	--	316	7.40	0.0	758	<1.9	--
17...	1449	1850	--	316	7.20	0.0	758	1.8	12
17...	1451	1850	--	314	7.20	0.0	758	1.6	11
17...	1453	1850	--	313	7.10	0.0	758	1.7	12
17...	1455	2050	--	312	7.60	0.0	--	--	--
JUN									
11...	1555	700	--	152	7.50	12.5	767	9.0	84
11...	1556	1100	--	151	7.60	12.5	767	9.0	84
11...	1557	1500	--	151	7.50	12.5	767	9.1	85
11...	1558	1900	--	151	7.60	12.5	767	9.0	84
11...	1559	2300	--	149	7.50	12.5	767	9.1	85
SEP									
28...	1315	--	500.0	168	8.20	6.0	756	10.3	84
28...	1317	--	700.0	168	8.20	6.0	756	10.8	88
28...	1319	--	1100	171	8.20	6.0	756	10.4	85
28...	1321	--	1500	171	8.20	6.0	756	10.1	82
28...	1323	--	1900	171	8.20	6.0	756	9.9	81

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	TUR- BID- ITY (NTU) (00076)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)
APR											
17...	1500	2350	50200	6.9	--	--	170	13	49	11	3.7
JUN											
11...	1600	2780	458000	52	K1	<1	78	16	23	4.9	2.1
SEP											
28...	1330	2700	416000	45	K1	<1	92	23	26	6.6	2.3

DATE	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)	ALKA- LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L - CACO3) (99430)	BICAR- BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR- BONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS- SOLVED (MG/L) (70300)
APR										
17...	1.6	155	155	189	0	17	1.3	0.10	13	194
JUN										
11...	1.2	62	62	76	0	18	1.1	<0.10	5.2	115
SEP										
28...	0.90	70	69	84	0	23	0.90	<0.10	7.1	121

DATE	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NITRITE DIS- SOLVED (MG/L AS N) (00613)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P) (00671)
APR										
17...	190	<0.010	0.200	0.090	0.090	0.21	0.30	0.020	<0.010	<0.010
JUN										
11...	93	<0.010	<0.100	0.030	0.040	0.57	0.60	0.280	0.020	<0.010
SEP										
28...	110	<0.010	0.100	0.020	0.020	0.48	0.50	0.020	0.030	0.010

K NON-IDEAL COLONY COUNT

15565447 YUKON RIVER AT PILOT STATION--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)
APR											
17...	1500	<10	<1	91	0.9	<1	<1	<3	5	88	<1
JUN											
11...	1600	60	1	42	<0.5	<1	<1	<3	7	310	5
SEP											
28...	1330	60	1	35	<0.5	1	1	<3	5	91	<5

DATE	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
APR										
17...	5	200	<0.1	<10	5	<1	<1	190	<6	<3
JUN										
11...	4	19	<0.1	<10	2	<1	<1	95	<7	8
SEP										
28...	4	3	<0.1	<10	3	<1	<1	110	<6	7

DATE	TIME	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	RADIUM 226, DISSOLVED, RADON METHOD (PCI/L) (09511)	URANIUM DISSOLVED, EXTRACTION (UG/L) (80020)
JUN									
11...	1600	<0.7	12	1.2	5.2	1.2	4.3	0.03	0.39

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)
APR							
17...	1500	2350	50200	7	949	--	--
JUN							
11...	1600	2780	458000	309	382000	10	16
SEP							
28...	1330	2700	416000	141	158000	16	23

DATE	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)
APR						
17...	--	--	--	--	--	--
JUN						
11...	23	36	56	81	98	100
SEP						
28...	--	47	--	82	94	100

15621000 SNAKE RIVER NEAR NOME

LOCATION.--Lat 64°33'51", long 165°30'26", in NW¼SE¼ sec.5, T.11 S., R.34 W., Hydrologic Unit 19020002, on downstream side of bridge on Nome-Teller Highway, 5.4 mi northwest of Nome.

DRAINAGE AREA.--85.7 mi^2, approximately.

PERIOD OF RECORD.--September 1965 to September 1981, October 1981 to September 1982 (discharge measurements and fragmentary gage-height record), October 1982 to current year.

GAGE.--Non-recording gage and crest-stage gage. Datum of gage is 8.58 ft above National Geodetic Vertical Datum of 1929 (USC&GS data furnished by Alaska Department of Transportation, Nome). Apr. 25, 1968 to July 11, 1979, water-stage recorder at same site and datum.

REMARKS.--Estimated daily discharges: Oct. 20 to May 30, June 25, 28, July 4, 6, 8-9, 13, 15, 18-20, Aug. 2, 9, 17, 31, and Sept. 1, 13, 17, 20-21, 25-30. Records poor.

AVERAGE DISCHARGE.--20 years (water-years 1966-81, 1983-86), 188 ft^3/s, 29.79 in/yr, 136,200 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 4,200 ft^3/s, June 2, 1966, gage height, 11.90 ft; maximum gage height, 13.59 ft, May 15, 1975, backwater from ice; minimum daily discharge, about 1.0 ft^3/s, Feb. 25 to May 15, 1971, but may be no flow at times during some winters.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 3,540 ft^3/s, Sept. 5, gage height, 11.54 ft; minimum daily, about 23 ft^3/s, Mar. 1 to Apr. 30.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	290	74	33	29	26	23	23	24	1360	146	209	216
2	279	68	33	29	26	23	23	24	1240	146	265	208
3	265	62	33	29	26	23	23	24	1400	137	391	232
4	274	56	33	28	26	23	23	24	1930	132	344	1070
5	686	52	32	28	25	23	23	25	1800	128	418	3020
6	2460	49	32	28	25	23	23	25	1120	120	470	2820
7	2400	47	32	28	25	23	23	25	907	121	420	2320
8	1500	45	32	28	25	23	23	26	1050	131	427	1640
9	1110	43	32	28	25	23	23	26	914	126	447	1170
10	829	41	31	28	25	23	23	26	735	122	468	1170
11	700	40	31	28	25	23	23	27	550	115	557	1820
12	622	40	31	28	25	23	23	27	519	111	823	1260
13	544	39	31	28	25	23	23	27	507	109	708	1740
14	490	39	31	28	25	23	23	28	570	109	725	2370
15	510	38	31	27	24	23	23	28	386	107	619	1610
16	467	38	31	27	24	23	23	28	343	104	628	1380
17	399	37	31	27	24	23	23	29	297	107	559	1140
18	398	37	30	27	24	23	23	29	270	113	490	1010
19	369	36	30	27	24	23	23	29	244	122	447	1070
20	320	36	30	27	24	23	23	30	212	129	433	1000
21	270	36	30	27	24	23	23	30	203	135	405	1000
22	230	35	30	27	24	23	23	30	190	126	368	1070
23	200	35	30	27	24	23	23	35	181	137	340	898
24	170	35	30	27	24	23	23	40	174	141	313	784
25	150	35	29	26	24	23	23	80	180	131	285	700
26	130	34	29	26	24	23	23	100	187	120	266	650
27	120	34	29	26	24	23	23	250	197	120	261	600
28	110	34	29	26	24	23	23	500	180	118	253	550
29	100	34	29	26	---	23	23	800	166	129	244	500
30	90	33	29	26	---	23	23	1000	160	123	230	460
31	82	---	29	26	---	23	---	1360	---	147	222	---
TOTAL	16564	1262	953	847	690	713	690	4756	18172	3862	13035	35478
MEAN	534	42.1	30.7	27.3	24.6	23.0	23.0	153	606	125	420	1183
MAX	2460	74	33	29	26	23	23	1360	1930	147	823	3020
MIN	82	33	29	26	24	23	23	24	160	104	209	208
CFSM	6.23	.49	.36	.32	.29	.27	.27	1.79	7.07	1.46	4.90	13.8
IN.	7.19	.55	.41	.37	.30	.31	.30	2.06	7.89	1.68	5.66	15.40
AC-FT	32850	2500	1890	1680	1370	1410	1370	9430	36040	7660	25850	70370

CAL YR 1985 TOTAL 80915 MEAN 222 MAX 2500 MIN 23 CFSM 2.59 IN 35.12 AC-FT 160500
WTR YR 1986 TOTAL 97022 MEAN 266 MAX 3020 MIN 23 CFSM 3.10 IN 42.11 AC-FT 192400

15637000 GOLD RUN CREEK NEAR TELLER

LOCATION.--Lat 65°02'30", long 166°10'06", in SE¼NE¼ sec.21, T.5 S., R.37 W., Hydrologic Unit 19020002, on left bank, 30 ft downstream from bridge at mile 52.7 of Nome-Teller Road, 18 mi southeast of Teller and 55 mi northwest of Nome.

DRAINAGE AREA.--24.2 mi².

PERIOD OF RECORD.--October 1985 to September 1986.

GAGE.--Water-stage recorder and crest-stage gage. Elevation of gage is 325 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1, Oct. 13 to June 3, and Sept. 25-27. Records good except for periods of no gage-height record, Oct. 1 and Oct. 13 to June 2, and periods of ice effect, June 3 and Sept. 25-27, which are poor.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 1,500 ft³/s, Sept. 4, gage height, 5.68 ft, from rating curve extended above 110 ft³/s on basis of slope-area measurement at gage height of 4.42 ft and slope-area estimate of peak flow; no flow Jan. 1 to May 9.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	170	.90	.20	.00	.00	.00	.00	.00	450	16	244	122
2	121	.90	.20	.00	.00	.00	.00	.00	750	12	299	170
3	100	.80	.20	.00	.00	.00	.00	.00	850	9.0	176	235
4	116	.80	.20	.00	.00	.00	.00	.00	900	7.8	86	1140
5	560	.80	.10	.00	.00	.00	.00	.00	634	7.1	70	943
6	324	.80	.10	.00	.00	.00	.00	.00	484	7.1	186	333
7	160	.70	.10	.00	.00	.00	.00	.00	544	6.5	101	261
8	135	.70	.10	.00	.00	.00	.00	.00	578	26	70	161
9	208	.70	.10	.00	.00	.00	.00	.00	378	56	41	152
10	88	.70	.10	.00	.00	.00	.00	.50	234	18	44	251
11	53	.60	.10	.00	.00	.00	.00	1.0	187	11	206	739
12	36	.60	.10	.00	.00	.00	.00	1.0	160	7.8	434	164
13	27	.60	.10	.00	.00	.00	.00	2.0	117	9.0	221	124
14	25	.60	.10	.00	.00	.00	.00	2.0	106	8.8	220	330
15	30	.50	.10	.00	.00	.00	.00	3.0	67	6.8	94	185
16	25	.50	.10	.00	.00	.00	.00	4.0	45	6.2	82	176
17	20	.50	.10	.00	.00	.00	.00	5.0	35	7.8	50	118
18	15	.50	.10	.00	.00	.00	.00	6.0	26	13	34	137
19	10	.50	.10	.00	.00	.00	.00	8.0	18	110	26	358
20	7.5	.40	.10	.00	.00	.00	.00	10	13	388	30	219
21	6.0	.40	.10	.00	.00	.00	.00	15	13	97	104	433
22	5.0	.40	.10	.00	.00	.00	.00	20	12	42	69	406
23	4.0	.40	.10	.00	.00	.00	.00	25	12	228	43	116
24	3.0	.40	.10	.00	.00	.00	.00	30	23	138	25	74
25	2.0	.30	.10	.00	.00	.00	.00	40	28	53	18	51
26	1.0	.30	.10	.00	.00	.00	.00	60	76	27	14	46
27	1.0	.30	.10	.00	.00	.00	.00	80	121	19	16	38
28	1.0	.30	.10	.00	.00	.00	.00	100	73	15	54	29
29	1.0	.30	.10	.00	---	.00	.00	150	33	25	151	20
30	.90	.20	.10	.00	---	.00	.00	200	20	46	83	20
31	.90	---	.10	.00	---	.00	---	300	---	60	63	---
TOTAL	2256.30	16.40	3.50	.00	.00	.00	.00	1062.50	6987	1483.9	3354	7551
MEAN	72.8	.55	.11	.000	.000	.000	.000	34.3	233	47.9	108	252
MAX	560	.90	.20	.00	.00	.00	.00	300	900	388	434	1140
MIN	.90	.20	.10	.00	.00	.00	.00	.00	12	6.2	14	20
CFSM	3.01	.02	.005	.000	.000	.000	.000	1.42	9.63	1.98	4.46	10.4
IN.	3.47	.03	.01	.00	.00	.00	.00	1.63	10.74	2.28	5.16	11.61
AC-FT	4480	33	6.9	.00	.00	.00	.00	2110	13860	2940	6650	14980

WTR YR 1986 TOTAL 22714.60 MEAN 62.2 MAX 1140 MIN .00 CFSM 2.57 IN 34.92 AC-FT 45050

15744500 KOBUK RIVER NEAR KIANA

LOCATION.--Lat 66°58'25", long 160°07'51", in NW¼SE¼ sec.11, T.18 N., R.7 W., Hydrologic Unit 19020001, on left bank, 5.8 mi upstream from Portage Creek, 9.7 mi upstream from Squirrel River, and 9.8 mi upstream from Kiana.

DRAINAGE AREA.--9,520 mi^2, approximately.

WATER DISCHARGE RECORDS

PERIOD OF RECORD.--September 1976 to current year.

REVISED RECORDS.--WDR AK-81-1: 1977 (M), 1978, 1979-80 (M).

GAGE.--Water-stage recorder. Altitude of gage is 35 ft, from topographic map.

REMARKS.--Estimated daily discharges: Oct.16 to June 2. Records fair except for period of ice effect, Oct. 16-20, and period of no gage-height record, Oct. 21 to June 2, which are poor.

AVERAGE DISCHARGE.--10 years, 15,200 ft^3/s, 21.68 in/yr, 11,010,000 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 152,000 ft^3/s, June 7, 1982, gage height 59.46 ft, from floodmarks, from rating curve extended above 109,000 ft^3/s; maximum gage height, 60.12 ft, about June 5, 1985, from flood marks; minimum daily, about 1,000 ft^3/s, Apr. 1 to May 14, 1984.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 141,000 ft^3/s, Sept. 7, gage height, 59.57 ft; minimum daily, 1,300 ft^3/s, Apr. 21 to May 16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	33900	12000	5800	3800	2600	2000	1500	1300	35000	21600	14200	24400
2	33400	11000	5800	3800	2600	2000	1500	1300	48000	19900	16900	31000
3	32300	11000	5600	3800	2600	2000	1500	1300	53800	18300	23700	36700
4	30800	11000	5600	3600	2600	2000	1500	1300	58800	16800	32800	44200
5	29800	10000	5400	3600	2600	2000	1500	1300	60400	15700	36400	83500
6	30100	9800	5400	3600	2600	1900	1500	1300	60200	14900	36400	129000
7	33100	9600	5200	3600	2600	1900	1500	1300	58500	14100	34200	138000
8	36100	9400	5200	3600	2600	1900	1500	1300	54900	13600	32300	123000
9	38100	9200	5200	3400	2400	1900	1500	1300	51900	13200	31200	106000
10	37100	9000	5000	3400	2400	1900	1400	1300	49900	13000	29600	92600
11	34800	8600	5000	3400	2400	1800	1400	1300	49100	12800	28700	82100
12	32900	8400	4800	3400	2400	1800	1400	1300	46100	12900	30000	91700
13	32600	8200	4800	3400	2400	1800	1400	1300	43900	12600	31700	96400
14	31400	8000	4800	3200	2400	1800	1400	1300	43600	12300	30600	88400
15	28100	8000	4600	3200	2400	1800	1400	1300	42600	11900	32900	85400
16	28000	7800	4600	3200	2400	1700	1400	1300	40200	11800	34400	87500
17	24000	7600	4600	3200	2400	1700	1400	1400	35600	11400	31500	85000
18	22000	7400	4400	3200	2200	1700	1400	1400	32100	10800	29300	78100
19	21000	7200	4400	3000	2200	1700	1400	1400	29500	10500	27800	74900
20	20000	7000	4400	3000	2200	1700	1400	1500	27300	10600	26000	91300
21	18000	7000	4400	3000	2200	1700	1300	1600	25000	11200	24500	107000
22	17000	6800	4400	3000	2200	1700	1300	1700	23100	12100	23400	101000
23	17000	6600	4200	3000	2200	1600	1300	1900	21600	12800	22900	89200
24	16000	6600	4200	3000	2200	1600	1300	2300	21000	13100	23200	79000
25	15000	6400	4200	3000	2200	1600	1300	2700	21300	13000	23300	69000
26	14000	6400	4000	2800	2000	1600	1300	3200	20700	12800	22400	59400
27	14000	6200	4000	2800	2000	1600	1300	4000	23500	12500	20700	51400
28	13000	6200	4000	2800	2000	1600	1300	5400	26100	12500	19300	44900
29	13000	6000	4000	2800	---	1600	1300	7000	25000	13000	18600	39700
30	12000	6000	3800	2800	---	1600	1300	10000	23100	13400	18300	36000
31	12000	---	3800	2800	---	1600	---	16000	---	13200	19200	---
TOTAL	770500	244400	145600	100200	66000	54800	41900	82300	1151800	418300	826400	2345800
MEAN	24850	8147	4697	3232	2357	1768	1397	2655	38390	13490	26660	78190
MAX	38100	12000	5800	3800	2600	2000	1500	16000	60400	21600	36400	138000
MIN	12000	6000	3800	2800	2000	1600	1300	1300	20700	10500	14200	24400
CFSM	2.61	.86	.49	.34	.25	.19	.15	.28	4.03	1.42	2.80	8.21
IN.	3.01	.96	.57	.39	.26	.21	.16	.32	4.50	1.63	3.23	9.17
AC-FT	1528000	484800	288800	198700	130900	108700	83110	163200	2285000	829700	1639000	4653000

CAL YR 1985 TOTAL 6262360 MEAN 17160 MAX 130000 MIN 1400 CFSM 1.80 IN 24.47 AC-FT 12420000
WTR YR 1986 TOTAL 6248000 MEAN 17120 MAX 138000 MIN 1300 CFSM 1.80 IN 24.41 AC-FT 12390000

15744500 KOBUK RIVER NEAR KIANA--Continued

PERIOD OF RECORD.--Water years 1976-81, 1985-86.

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
AUG					
27...	1745	20400	7	386	57

15747000 WULIK RIVER BELOW TUTAK CREEK NEAR KIVALINA

LOCATION.--Lat 67°52'34", long 163°40'28", in NW¼ sec. 34, T.29 N., R.22 W., Hydrologic Unit 19020001, on left bank 0.1 mi downstream from Tutak Creek and 25 mi northeast of Kivalina.

DRAINAGE AREA.--705 mi^2.

PERIOD OF RECORD.--September 1984 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 175 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 16 to June 3, June 24 to July 16, and Aug. 6 to Sept. 30. Records fair except for period with ice effect, Oct. 16 to Nov. 5, and periods with no gage-height record, Nov. 6 to June 3, June 24 to July 16, and Aug. 6 to Sept. 30, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 15,600 ft^3/s, Aug. 29, 1985, gage height, 9.32 ft, from rating curve extended above 6,100 ft^3/s on basis of velocity-area study; maximum gage height, 10.37 ft, June 2, 1986, backwater from ice; minimum daily discharge, about 9 ft^3/s, Apr, 30 to May 10, 1985.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, about 15,000 ft^3/s, June 2; maximum gage height, 10.37 ft, June 2, from floodmark, backwater from ice; minimum daily discharge, about 23 ft^3/s, May 6-16.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1430	280	140	80	60	40	30	24	500	1100	3000	1200
2	1240	280	140	80	60	40	30	24	15000	1100	2150	1600
3	1060	260	140	80	60	40	30	24	10000	1000	2790	2400
4	1010	260	140	80	50	40	30	24	7340	1000	3650	3000
5	1120	240	140	80	50	40	29	24	7200	1000	4130	8000
6	2790	240	120	80	50	40	29	23	7240	960	4200	6000
7	6720	240	120	80	50	40	29	23	6720	920	4300	3000
8	8250	220	120	80	50	40	29	23	5640	900	4000	2500
9	5230	220	120	80	50	40	28	23	6060	880	3600	2000
10	3310	220	120	80	50	40	28	23	4880	860	3000	1400
11	2040	200	120	70	50	35	28	23	4330	820	2600	1600
12	1830	200	120	70	50	35	28	23	3530	820	2400	2000
13	1580	200	120	70	50	35	27	23	3040	800	2000	2200
14	1010	180	120	70	50	35	27	23	3510	780	1900	2000
15	816	180	120	70	50	35	27	23	4080	780	1700	1800
16	760	180	100	70	50	35	27	23	2710	760	1600	1700
17	660	180	100	70	50	35	26	24	2440	760	1500	1600
18	600	180	100	70	50	35	26	24	1920	704	1400	1600
19	540	180	100	70	45	35	26	25	1620	728	1300	1600
20	500	160	100	70	45	35	25	25	1020	904	1200	2000
21	470	160	100	70	45	35	25	26	872	1320	1200	3000
22	440	160	100	60	45	35	25	27	968	1040	1100	4000
23	410	160	100	60	45	35	25	28	864	888	1100	2400
24	390	160	100	60	45	35	25	30	800	848	1100	1800
25	380	160	90	60	45	35	25	32	900	936	1000	1500
26	360	140	90	60	45	35	25	35	1000	1000	1000	1300
27	340	140	90	60	45	35	24	45	1100	1010	960	1100
28	320	140	90	60	45	35	24	60	1200	1260	940	1000
29	320	140	90	60	---	30	24	80	1200	1510	920	900
30	300	140	90	60	---	30	24	120	1200	2310	920	800
31	300	---	90	60	---	30	---	200	---	4730	960	---
TOTAL	46526	5800	3430	2170	1380	1120	805	1154	108884	34428	63620	67000
MEAN	1501	193	111	70.0	49.3	36.1	26.8	37.2	3629	1111	2052	2233
MAX	8250	280	140	80	60	40	30	200	15000	4730	4300	8000
MIN	300	140	90	60	45	30	24	23	500	704	920	800
CFSM	2.13	.27	.16	.10	.07	.05	.04	.05	5.15	1.58	2.91	3.17
IN.	2.45	.31	.18	.11	.07	.06	.04	.06	5.75	1.82	3.36	3.54
AC-FT	92280	11500	6800	4300	2740	2220	1600	2290	216000	68290	126200	132900

CAL YR 1985 TOTAL 308121.0 MEAN 844 MAX 13300 MIN 9.0 CFSM 1.20 IN 16.26 AC-FT 611200
WTR YR 1986 TOTAL 336317.0 MEAN 921 MAX 15000 MIN 23 CFSM 1.31 IN 17.75 AC-FT 667100

15798700 NUNAVAK CREEK NEAR BARROW

LOCATION.--Lat 71°15'35", long 156°46'57", in SE¼ sec. 18, T. 22 N., R. 18 W., North Slope Borough, Hydrologic Unit 19010003, 0.7 mi downstream from Emaiksoun Lake, 1.2 mi upstream from Nunavak Bay, and 2.3 mi south of Barrow Post Office.

DRAINAGE AREA.--2.79 mi^2, approximately.

PERIOD OF RECORD.--October 1971 to current year.

REVISED RECORDS.--WDR AK-76-1: 1972.

GAGE.--Water-stage recorder. Elevation of gage is 19 ft above National Geodetic Datum of 1929, from topographic map. Prior to May 29, 1982 at site 10 ft downstream at datum about 29.6 ft higher.

REMARKS.--Estimated daily discharges: Oct. 1 to June 18, and Sept. 24-30. Records fair except for periods of ice effect, June 16-18 and Sept. 24-30, and period of no gage-height record, Oct. 1 to June 15, which are poor.

AVERAGE DISCHARGE.--15 years, 0.89 ft^3/s, 4.33 in/yr, 645 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 131 ft^3/s, June 10, 1980, gage height, 4.86 ft, at site and datum then in use, flow over snow; no flow during all winter months and at times during summer months.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 31 ft^3/s, June 22, gage height, 32.15 ft; maximum gage height observed, 33.66 ft, June 16, backwater from snow and ice; no flow prior to May 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	.00	.00	.00	.00	.00	.00	.00	.00	.40	4.5	1.5	.98
2	.00	.00	.00	.00	.00	.00	.00	.00	.20	3.8	1.0	1.3
3	.00	.00	.00	.00	.00	.00	.00	.00	.10	3.5	.83	1.3
4	.00	.00	.00	.00	.00	.00	.00	.00	.10	3.1	.62	2.1
5	.00	.00	.00	.00	.00	.00	.00	.00	.10	3.0	1.3	3.4
6	.00	.00	.00	.00	.00	.00	.00	.00	.10	2.7	.79	3.4
7	.00	.00	.00	.00	.00	.00	.00	.00	.20	2.7	.47	3.1
8	.00	.00	.00	.00	.00	.00	.00	.00	.30	2.5	.38	4.1
9	.00	.00	.00	.00	.00	.00	.00	.00	.50	2.4	.29	7.0
10	.00	.00	.00	.00	.00	.00	.00	.00	.60	2.3	.35	16
11	.00	.00	.00	.00	.00	.00	.00	.00	.80	2.1	.29	22
12	.00	.00	.00	.00	.00	.00	.00	.00	1.0	2.0	.18	20
13	.00	.00	.00	.00	.00	.00	.00	.00	3.0	2.0	.16	12
14	.00	.00	.00	.00	.00	.00	.00	.00	7.0	1.8	.16	11
15	.00	.00	.00	.00	.00	.00	.00	.00	10	1.7	.18	8.1
16	.00	.00	.00	.00	.00	.00	.00	.00	13	1.5	.26	8.1
17	.00	.00	.00	.00	.00	.00	.00	.00	9.0	1.5	.41	9.4
18	.00	.00	.00	.00	.00	.00	.00	.00	6.0	2.1	.58	10
19	.00	.00	.00	.00	.00	.00	.00	.00	3.6	2.2	1.2	11
20	.00	.00	.00	.00	.00	.00	.00	.00	5.6	2.5	1.0	12
21	.00	.00	.00	.00	.00	.00	.00	.00	15	2.3	2.6	24
22	.00	.00	.00	.00	.00	.00	.00	.00	29	2.4	1.3	14
23	.00	.00	.00	.00	.00	.00	.00	.00	23	2.4	.88	11
24	.00	.00	.00	.00	.00	.00	.00	.00	13	4.8	.78	9.0
25	.00	.00	.00	.00	.00	.00	.00	.00	11	2.6	.74	9.0
26	.00	.00	.00	.00	.00	.00	.00	.00	9.7	1.2	.70	5.0
27	.00	.00	.00	.00	.00	.00	.00	.00	9.7	.74	.58	4.0
28	.00	.00	.00	.00	.00	.00	.00	.10	7.9	.58	.62	3.0
29	.00	.00	.00	.00	---	.00	.00	.30	7.0	.74	1.7	3.0
30	.00	.00	.00	.00	---	.00	.00	.40	5.5	1.4	3.0	2.0
31	.00	---	.00	.00	---	.00	---	.70	---	2.1	1.0	---
TOTAL	.00	.00	.00	.00	.00	.00	.00	1.50	192.40	70.96	25.85	250.28
MEAN	.000	.000	.000	.000	.000	.000	.000	.048	6.41	2.29	.83	8.34
MAX	.00	.00	.00	.00	.00	.00	.00	.70	29	4.8	3.0	24
MIN	.00	.00	.00	.00	.00	.00	.00	.00	.10	.58	.16	.98
CFSM	.000	.000	.000	.000	.000	.000	.000	.02	2.30	.82	.30	2.99
IN.	.00	.00	.00	.00	.00	.00	.00	.02	2.56	.95	.34	3.34
AC-FT	.00	.00	.00	.00	.00	.00	.00	3.0	382	141	51	496

CAL YR 1985 TOTAL 364.77 MEAN 1.00 MAX 18 MIN .00 CFSM .36 IN 4.86 AC-FT 724
WTR YR 1986 TOTAL 540.99 MEAN 1.48 MAX 29 MIN .00 CFSM .53 IN 7.21 AC-FT 1070

15896000 KUPARUK RIVER NEAR DEADHORSE

(National stream-quality accounting network station)

LOCATION.--Lat 70°16'54", long 148°57'35", in NE¼ sec.25, T.11 N., R.12 E., North Slope Borough, Hydrologic Unit 19010001, on right bank, 1.8 mi northeast of SE Eileen State No. 1, 2.1 mi south of Arctic Slope/Alaska General Camp, 10 mi upstream from mouth on Gwyder Bay, and 13 mi northwest of Deadhorse.

DRAINAGE AREA.--3,130 mi².

WATER-DISCHARGE RECORDS

PERIOD OF RECORD.--June 1971 to current year.

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929 (levels by private engineering firm).

REMARKS.--Estimated daily discharges: Oct. 1 to June 14 and Sept. 25-30. Records good except for estimated daily discharges, which are poor. Winter low flow may be discontinuous as the flow probably varies significantly along the main stem of the river due to the formation of aufeis in the vicinity of springs. Flow may cease at other points.

AVERAGE DISCHARGE.--15 years, 1,339 ft³/s, 5.81 in/yr, 970,100 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 118,000 ft³/s, June 7, 1978, gage height, 37.6 ft, from range-line on recorder chart; no flow at times during winter periods.

EXTREMES FOR CURRENT YEAR.--Maximum daily discharge, about 38,000 ft³/s, June 8, gage height, 35.40 ft, backwater from snow and ice; no flow, Dec. 16 to May 22.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	660	80	20	.00	.00	.00	.00	.00	160	1310	431	1740
2	580	70	20	.00	.00	.00	.00	.00	300	1150	940	2520
3	520	70	10	.00	.00	.00	.00	.00	500	1020	3200	2540
4	480	60	10	.00	.00	.00	.00	.00	1000	908	2670	2160
5	440	60	10	.00	.00	.00	.00	.00	3000	845	2290	1850
6	400	60	10	.00	.00	.00	.00	.00	9000	785	1980	1620
7	380	60	10	.00	.00	.00	.00	.00	30000	718	1730	1430
8	340	50	10	.00	.00	.00	.00	.00	38000	651	1890	1280
9	320	50	10	.00	.00	.00	.00	.00	34000	591	2290	1170
10	300	50	10	.00	.00	.00	.00	.00	31000	556	2190	1060
11	280	50	10	.00	.00	.00	.00	.00	29000	523	1870	988
12	260	40	10	.00	.00	.00	.00	.00	29000	500	1640	943
13	240	40	10	.00	.00	.00	.00	.00	30000	487	1460	880
14	220	40	10	.00	.00	.00	.00	.00	30000	471	1350	863
15	220	40	10	.00	.00	.00	.00	.00	27600	458	1270	853
16	200	40	.00	.00	.00	.00	.00	.00	26800	448	1220	848
17	180	30	.00	.00	.00	.00	.00	.00	25300	398	1190	830
18	180	30	.00	.00	.00	.00	.00	.00	17000	383	1120	807
19	160	30	.00	.00	.00	.00	.00	.00	13400	392	1060	790
20	160	30	.00	.00	.00	.00	.00	.00	16400	410	1070	797
21	140	30	.00	.00	.00	.00	.00	.00	15600	424	1150	822
22	140	30	.00	.00	.00	.00	.00	.00	11500	403	1200	809
23	140	20	.00	.00	.00	.00	.00	10	7420	359	1260	820
24	120	20	.00	.00	.00	.00	.00	10	5030	364	1600	780
25	120	20	.00	.00	.00	.00	.00	10	3710	365	1870	740
26	120	20	.00	.00	.00	.00	.00	10	3100	352	1880	740
27	100	20	.00	.00	.00	.00	.00	20	2600	353	1870	720
28	100	20	.00	.00	.00	.00	.00	20	2210	337	1730	720
29	90	20	.00	.00	---	.00	.00	40	1860	331	1590	700
30	90	20	.00	.00	---	.00	.00	60	1540	382	1560	700
31	80	---	.00	.00	---	.00	---	100	---	398	1510	---
TOTAL	7760	1200	170.00	.00	.00	.00	.00	280.00	446030	17072	50081	33520
MEAN	250	40.0	5.48	.000	.000	.000	.000	9.03	14870	551	1616	1117
MAX	660	80	20	.00	.00	.00	.00	100	38000	1310	3200	2540
MIN	80	20	.00	.00	.00	.00	.00	.00	160	331	431	700
CFSM	.08	.01	.002	.000	.000	.000	.000	.003	4.75	.18	.52	.36
IN.	.09	.01	.00	.00	.00	.00	.00	.00	5.30	.20	.60	.40
AC-FT	15390	2380	337	.00	.00	.00	.00	555	884700	33860	99340	66490

CAL YR 1985 TOTAL 268938.00 MEAN 737 MAX 30000 MIN .00 CFSM .24 IN 3.20 AC-FT 533400
WTR YR 1986 TOTAL 556113.00 MEAN 1524 MAX 38000 MIN .00 CFSM .49 IN 6.61 AC-FT 1103000

15896000 KUPARUK RIVER NEAR DEADHORSE--Continued

WATER-QUALITY RECORDS

PERIOD OF RECORD.--Water years 1970-72, 1974 to current year (discontinued).

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE AIR (DEG C) (00020)	TEMPEPATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
OCT 04...	1500	477	124	7.70	-2.0	0.0	0.70	787	14.4	95	0	0
JUN 11...	2045	29400	50	7.50	2.0	0.5	33	777	13.9	95	K27	K10
JUL 03...	1230	968	110	7.70	5.0	9.0	0.60	772	14.3	122	0	0
AUG 21...	1230	1170	115	6.90	4.0	7.5	0.60	764	12.7	105	0	0

DATE	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)
OCT 04...	67	6	23	2.4	1.8	0.60	61	61	74	9.2	1.3	0.40
JUN 11...	15	2	4.8	0.70	0.60	0.70	13	13	16	8.7	1.1	<0.10
JUL 03...	55	3	19	1.8	1.5	0.40	54	52	64	4.0	1.6	<0.10
AUG 21...	56	17	19	2.0	1.9	0.40	48	39	48	4.3	0.90	<0.10

DATE	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN, ORGANIC TOTAL (MG/L AS N) (00605)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) (00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)
OCT 04...	2.1	82	77	< 0.010	0.360	0.020	0.020	0.28	0.30	< 0.010	< 0.010	< 0.010
JUN 11...	0.8	28	26	< 0.010	< 0.100	0.060	0.040	0.64	0.70	0.160	0.020	< 0.010
JUL 03...	1.3	65	61	< 0.010	< 0.100	< 0.010	0.020	0.29	0.30	0.010	0.010	< 0.010
AUG 21...	1.9	80	54	< 0.010	< 0.100	0.040	0.010	0.36	0.40	0.020	0.020	< 0.010

DATE	ALUMINUM, DISSOLVED (UG/L AS AL) (01106)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)
OCT 04...	20	< 1	41	< 0.5	< 1	< 1	< 3	4	16	3	< 4	< 1
JUN 11...	30	< 1	16	< 0.5	< 1	< 1	< 3	7	160	5	< 4	27
JUL 03...	< 10	< 1	31	38	< 1	< 1	< 3	3	20	< 5	< 4	3
AUG 21...	< 10	< 1	35	< 0.5	< 1	< 1	< 3	1	14	< 5	5	< 1

DATE	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	NICKEL, DISSOLVED (UG/L AS NI) (01065)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
OCT 04...	< 0.1	< 10	1	< 1	< 1	44	< 6	45	2	2.6	50
JUN 11...	0.1	< 10	3	< 1	< 1	12	< 6	19	158	12500	92
JUL 03...	0.1	< 10	2	< 1	< 1	39	< 6	6	2	5.2	50
AUG 21...	< 0.1	< 10	2	< 1	< 1	39	< 6	7	8	25	57

K NON-IDEAL COLONY COUNT

15896700 PUTULIGAYUK RIVER NEAR DEADHORSE

LOCATION.--Lat 70°16'03", long 148°37'41", in NE¼ sec.32, T.11 N., R.14 E., North Slope Borough, Hydrologic Unit 19010001, at midchannel 200 ft upstream from culvert causeway, 0.2 mi downstream from unnamed tributary, 6.2 mi northwest of Deadhorse, and 7.3 mi upstream from mouth on Prudhoe Bay.

DRAINAGE AREA.--176 mi^2, approximately.

PERIOD OF RECORD.--May 1970 to September 1979 and October 1981 to September 1986 (discontinued).

GAGE.--Water-stage recorder. Datum of gage is at National Geodetic Vertical Datum of 1929 (levels by private engineering firm). Prior to June 4, 1972, on right bank 150 ft downstream at same datum.

REMARKS.--Estimated daily discharges: Oct. 5 to June 16, July 12 to Aug. 20, and Sept. 23-30. Records fair except for the period of ice effect, June 12-15, and periods of no gage-height record, Oct. 5 to June 11 and July 12 to Aug. 20, which are poor.

AVERAGE DISCHARGE.--14 years (water years 1970-79, 1982-86), 42.3 ft^3/s, 3.26 in/yr, 30,650 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 5,440 ft^3/s, June 17, 1986, gage height, 21.84 ft; maximum gage height, 24.0 ft, June 5, 1973, backwater from snow and ice; no flow during winter periods each year.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of June 12, 1980 had a stage of 22.6 ft and discharge of 5,800 ft^3/s, from information by private engineering firm.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 5,440 ft^3/s, June 17, gage height, 21.84 ft; maximum gage-height, 21.99 ft, June 16, backwater from snow and ice; no flow, Oct. 17 to May 29.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	5.0	.00	.00	.00	.00	.00	.00	.00	10	121	16	20
2	5.0	.00	.00	.00	.00	.00	.00	.00	15	98	16	18
3	5.0	.00	.00	.00	.00	.00	.00	.00	10	81	15	18
4	5.0	.00	.00	.00	.00	.00	.00	.00	8.0	69	15	18
5	4.5	.00	.00	.00	.00	.00	.00	.00	6.0	59	18	19
6	4.0	.00	.00	.00	.00	.00	.00	.00	5.0	51	20	19
7	3.5	.00	.00	.00	.00	.00	.00	.00	5.0	45	22	19
8	3.0	.00	.00	.00	.00	.00	.00	.00	4.0	38	20	18
9	2.5	.00	.00	.00	.00	.00	.00	.00	4.0	33	19	17
10	2.0	.00	.00	.00	.00	.00	.00	.00	5.0	29	18	17
11	2.0	.00	.00	.00	.00	.00	.00	.00	10	26	17	18
12	1.5	.00	.00	.00	.00	.00	.00	.00	20	23	17	17
13	1.0	.00	.00	.00	.00	.00	.00	.00	100	20	19	15
14	1.0	.00	.00	.00	.00	.00	.00	.00	250	18	20	16
15	.50	.00	.00	.00	.00	.00	.00	.00	300	16	19	16
16	.50	.00	.00	.00	.00	.00	.00	.00	3500	14	18	15
17	.00	.00	.00	.00	.00	.00	.00	.00	4490	13	17	15
18	.00	.00	.00	.00	.00	.00	.00	.00	2620	12	17	14
19	.00	.00	.00	.00	.00	.00	.00	.00	2160	11	18	14
20	.00	.00	.00	.00	.00	.00	.00	.00	1850	10	19	13
21	.00	.00	.00	.00	.00	.00	.00	.00	1390	11	20	14
22	.00	.00	.00	.00	.00	.00	.00	.00	970	12	20	13
23	.00	.00	.00	.00	.00	.00	.00	.00	730	12	23	14
24	.00	.00	.00	.00	.00	.00	.00	.00	580	11	25	13
25	.00	.00	.00	.00	.00	.00	.00	.00	477	11	24	13
26	.00	.00	.00	.00	.00	.00	.00	.00	389	11	22	12
27	.00	.00	.00	.00	.00	.00	.00	.00	329	10	19	12
28	.00	.00	.00	.00	.00	.00	.00	.00	250	10	19	11
29	.00	.00	.00	.00	---	.00	.00	.00	193	10	20	11
30	.00	.00	.00	.00	---	.00	.00	2.0	147	12	21	10
31	.00	---	.00	.00	---	.00	---	5.0	---	14	20	---
TOTAL	46.00	.00	.00	.00	.00	.00	.00	7.00	20827.0	911	593	459
MEAN	1.48	.000	.000	.000	.000	.000	.000	.23	694	29.4	19.1	15.3
MAX	5.0	.00	.00	.00	.00	.00	.00	5.0	4490	121	25	20
MIN	.00	.00	.00	.00	.00	.00	.00	.00	4.0	10	15	10
CFSM	.008	.000	.000	.000	.000	.000	.000	.001	3.94	.17	.11	.09
IN.	.01	.00	.00	.00	.00	.00	.00	.00	4.40	.19	.13	.10
AC-FT	91	.00	.00	.00	.00	.00	.00	14	41310	1810	1180	910

CAL YR 1985 TOTAL 11303.04 MEAN 31.0 MAX 2310 MIN .00 CFSM .18 IN 2.39 AC-FT 22420
WTR YR 1986 TOTAL 22843.00 MEAN 62.6 MAX 4490 MIN .00 CFSM .36 IN 4.83 AC-FT 45310

15904900 ATIGUN RIVER TRIBUTARY NEAR PUMP STATION 4

LOCATION.--Lat 68°22'25", long 149°18'48", in NE¼SE¼ sec.28, T.12 S., R.12 E., North Slope Borough, Hydrologic Unit 19010001, on right bank 0.2 mi upstream from culvert at mi 191 on Dalton Highway, 0.9 mi upstream from mouth, and 4 mi south of Pump Station 4.

DRAINAGE AREA.--32.6 mi².

PERIOD OF RECORD.--October 1976 to September 1986 (discontinued as a continuous-record station; converted to a crest-stage partial-record station).

GAGE.--Water-stage recorder. Elevation of gage is 2,790 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 1 to June 1, Aug. 16-19, and Sept 22-30. Records fair except for estimated daily discharges, which are poor.

AVERAGE DISCHARGE.--10 years, 29.0 ft³/s, 12.08 in/yr, 21,010 acre-ft/yr.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 975 ft³/s, June 20, 1984, gage height, 14.45 ft, from rating curve extended above 260 ft³/s on basis of slope-area measurement at a gage height of 14.5 ft; no flow during winter periods.

EXTREMES OUTSIDE PERIOD OF RECORD.--Flood of July 29-30, 1976 reached a stage of 14.5 ft, from floodmarks, discharge, 1,000 ft³/s, from slope-area measurement.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 558 ft³/s, June 24, gage height, 13.48 ft, from rating curve extended as explained above; no flow Oct. 11 to May 27.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	1.0	.00	.00	.00	.00	.00	.00	.00	30	97	176	62
2	1.0	.00	.00	.00	.00	.00	.00	.00	69	94	120	65
3	1.0	.00	.00	.00	.00	.00	.00	.00	48	90	101	53
4	1.0	.00	.00	.00	.00	.00	.00	.00	52	103	103	41
5	1.0	.00	.00	.00	.00	.00	.00	.00	91	113	110	40
6	1.0	.00	.00	.00	.00	.00	.00	.00	128	130	96	46
7	1.0	.00	.00	.00	.00	.00	.00	.00	157	132	86	44
8	1.0	.00	.00	.00	.00	.00	.00	.00	182	120	76	41
9	1.0	.00	.00	.00	.00	.00	.00	.00	195	117	78	41
10	1.0	.00	.00	.00	.00	.00	.00	.00	217	129	76	34
11	.00	.00	.00	.00	.00	.00	.00	.00	148	102	70	28
12	.00	.00	.00	.00	.00	.00	.00	.00	112	86	56	25
13	.00	.00	.00	.00	.00	.00	.00	.00	117	87	48	22
14	.00	.00	.00	.00	.00	.00	.00	.00	109	215	44	19
15	.00	.00	.00	.00	.00	.00	.00	.00	142	163	40	23
16	.00	.00	.00	.00	.00	.00	.00	.00	142	154	36	48
17	.00	.00	.00	.00	.00	.00	.00	.00	140	157	32	54
18	.00	.00	.00	.00	.00	.00	.00	.00	112	158	28	46
19	.00	.00	.00	.00	.00	.00	.00	.00	130	205	26	40
20	.00	.00	.00	.00	.00	.00	.00	.00	234	151	22	33
21	.00	.00	.00	.00	.00	.00	.00	.00	164	174	25	26
22	.00	.00	.00	.00	.00	.00	.00	.00	133	166	21	22
23	.00	.00	.00	.00	.00	.00	.00	.00	186	123	18	16
24	.00	.00	.00	.00	.00	.00	.00	.00	338	98	15	11
25	.00	.00	.00	.00	.00	.00	.00	.00	146	88	13	7.0
26	.00	.00	.00	.00	.00	.00	.00	.00	92	123	13	5.0
27	.00	.00	.00	.00	.00	.00	.00	.00	76	154	15	3.0
28	.00	.00	.00	.00	.00	.00	.00	1.0	85	169	21	2.0
29	.00	.00	.00	.00	---	.00	.00	2.0	94	182	39	1.0
30	.00	.00	.00	.00	---	.00	.00	4.0	80	281	66	1.0
31	.00	---	.00	.00	---	.00	---	10	---	261	63	---
TOTAL	10.00	.00	.00	.00	.00	.00	.00	17.00	3949	4442	1733	899.0
MEAN	.32	.000	.000	.000	.000	.000	.000	.55	132	143	55.9	30.0
MAX	1.0	.00	.00	.00	.00	.00	.00	10	338	281	176	65
MIN	.00	.00	.00	.00	.00	.00	.00	.00	30	86	13	1.0
CFSM	.01	.000	.000	.000	.000	.000	.000	.02	4.05	4.39	1.72	.92
IN.	.01	.00	.00	.00	.00	.00	.00	.02	4.51	5.07	1.98	1.03
AC-FT	20	.00	.00	.00	.00	.00	.00	34	7830	8810	3440	1780

CAL YR 1985 TOTAL 7604.30 MEAN 20.8 MAX 410 MIN .00 CFSM .64 IN 8.68 AC-FT 15080
WTR YR 1986 TOTAL 11050.00 MEAN 30.3 MAX 338 MIN .00 CFSM .93 IN 12.61 AC-FT 21920

15908000 SAGAVANIRKTOK RIVER NEAR PUMP STATION 3

LOCATION.--Lat 69°00'54", long 148°49'02", in NW¼ sec.16, T.5 S., R.14 E., North Slope Borough, Hydrologic Unit 19010001, on left bank 600 ft east of Dalton Highway at mi 419, 6.0 mi upstream from Lupine River, and 15 mi north of Pump Station 3.

DRAINAGE AREA.--1,860 mi^2, approximately.

PERIOD OF RECORD.--September 1982 to current year.

GAGE.--Water-stage recorder. Elevation is 1,150 ft above National Geodetic Vertical Datum of 1929, from topographic map.

REMARKS.--Estimated daily discharges: Oct. 2 to June 12 and Sept. 19-22, 25-30. Records good except for estimated daily discharges, which are poor.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, about 23,000 ft^3/s, June 1, 1983, gage height, 21.07 ft, backwater from ice; no flow during winter periods.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 11,600 ft^3/s, July 31, gage height, 17.32 ft; no flow Mar. 21 to May 24.

DISCHARGE, IN CUBIC FEET PER SECOND, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MEAN VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
1	763	140	60	28	10	3.0	.00	.00	200	3460	8760	3490
2	630	140	58	28	9.0	3.0	.00	.00	700	4050	6440	3380
3	500	120	58	28	9.0	2.0	.00	.00	2000	3510	5260	3330
4	460	120	56	26	9.0	2.0	.00	.00	4000	3470	4400	2800
5	420	120	54	26	8.0	2.0	.00	.00	6000	3590	4110	2410
6	380	120	52	24	8.0	2.0	.00	.00	7000	3670	5480	2470
7	360	120	52	24	8.0	2.0	.00	.00	8000	3870	5150	2440
8	340	120	50	24	7.0	2.0	.00	.00	8400	3860	4100	2280
9	320	100	50	22	7.0	2.0	.00	.00	8400	3600	3430	2230
10	300	100	48	22	7.0	2.0	.00	.00	8000	4030	3330	2140
11	280	100	48	22	6.0	2.0	.00	.00	7200	4350	3100	1930
12	280	100	46	20	6.0	1.0	.00	.00	6800	3440	2860	1790
13	260	94	46	20	6.0	1.0	.00	.00	6590	3110	2630	1880
14	260	94	44	20	6.0	1.0	.00	.00	6660	4170	2480	1730
15	240	90	44	18	5.0	1.0	.00	.00	6430	5300	2340	1550
16	240	86	42	18	5.0	1.0	.00	.00	6260	4540	2170	1630
17	220	86	42	18	5.0	1.0	.00	.00	6110	4240	2000	2030
18	220	80	40	16	5.0	1.0	.00	.00	5150	4230	1860	2080
19	200	80	40	16	4.0	1.0	.00	.00	4980	5150	1760	2000
20	200	80	38	16	4.0	1.0	.00	.00	5610	5170	1630	1800
21	200	80	38	14	4.0	.00	.00	.00	6190	4650	1620	1600
22	180	74	36	14	4.0	.00	.00	.00	5580	5060	1840	1500
23	180	74	36	14	4.0	.00	.00	.00	5530	4030	1520	1360
24	180	72	36	14	3.0	.00	.00	.00	7760	3310	1790	1170
25	160	70	34	12	3.0	.00	.00	1.0	5990	3070	1570	1100
26	160	68	34	12	3.0	.00	.00	1.0	4830	3450	1470	1000
27	160	66	32	12	3.0	.00	.00	2.0	3900	4650	1480	960
28	160	64	32	12	3.0	.00	.00	4.0	3430	5070	1600	900
29	140	64	32	10	---	.00	.00	10	3570	6830	1770	860
30	140	62	30	10	---	.00	.00	30	3390	7120	2490	800
31	140	---	30	10	---	.00	---	100	---	10900	3510	---
TOTAL	8673	2784	1338	570	161.0	33.00	.00	148.00	164660	138950	93950	56640
MEAN	280	92.8	43.2	18.4	5.75	1.06	.000	4.77	5489	4482	3031	1888
MAX	763	140	60	28	10	3.0	.00	100	8400	10900	8760	3490
MIN	140	62	30	10	3.0	.00	.00	.00	200	3070	1470	800
CFSM	.15	.05	.02	.01	.003	.001	.000	.003	2.95	2.41	1.63	1.02
IN.	.17	.06	.03	.01	.00	.00	.00	.00	3.29	2.78	1.88	1.13
AC-FT	17200	5520	2650	1130	319	65	.00	294	326600	275600	186300	112300

CAL YR 1985 TOTAL 396441.00 MEAN 1086 MAX 14100 MIN .00 CFSM .58 IN 7.93 AC-FT 786300
WTR YR 1986 TOTAL 467907.00 MEAN 1282 MAX 10900 MIN .00 CFSM .69 IN 9.36 AC-FT 928100

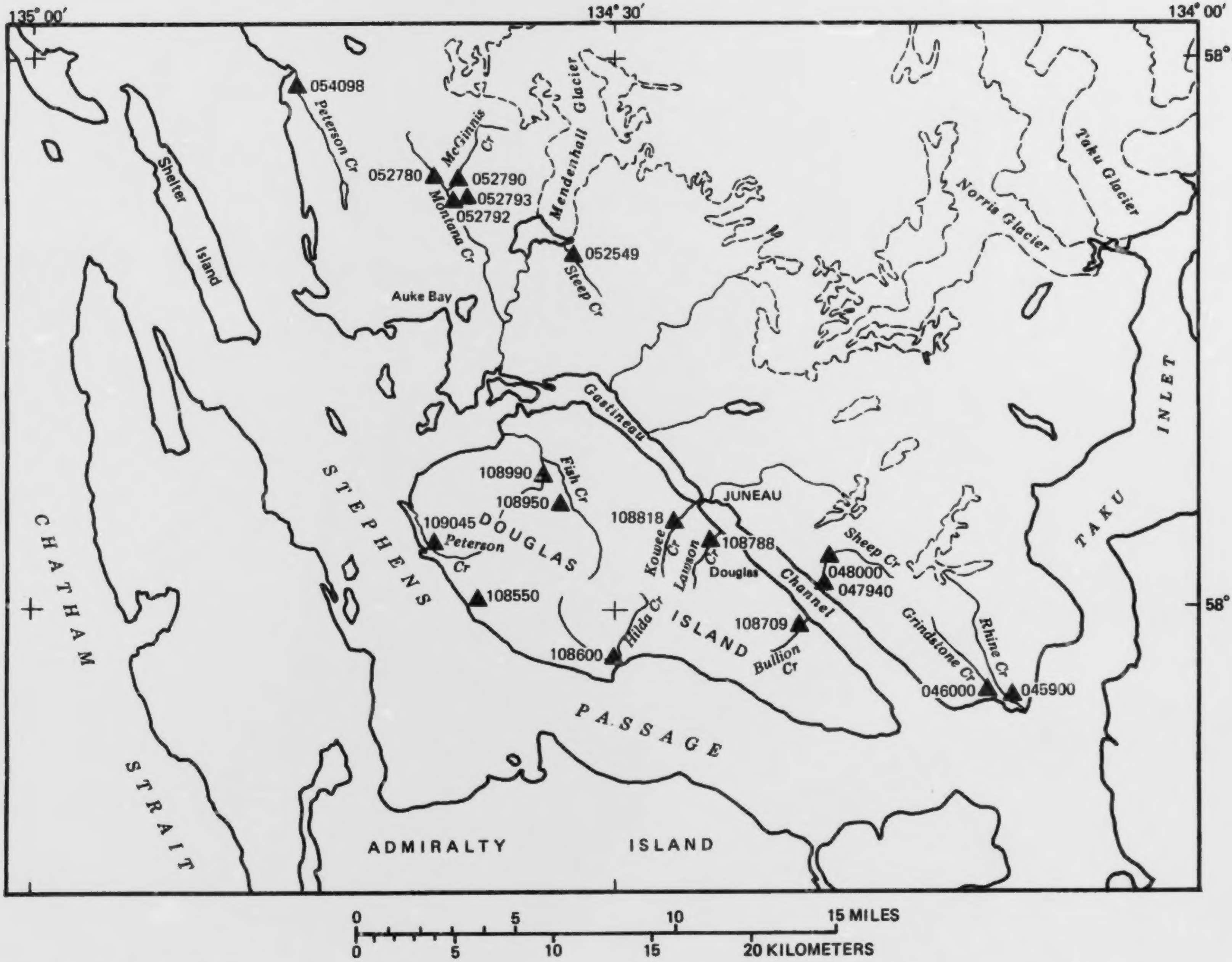

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Figure 4.–Locations for low-flow partial-record stations.

As the number of streams on which streamflow information is likely to be desired far exceeds the number of stream-gaging stations feasible to operate at one time, the Geological Survey collects limited stream-flow data at sites other than stream-gaging stations. When limited streamflow data are collected on a systematic basis over a period of years for use in hydrologic analyses, the site at which the data are collected is called a partial-record station. Data collected at these partial-record stations are useable in low-flow or floodflow analyses, depending on the type of data collected. In addition, discharge measurements are made at other sites not included in the partial-record program. These measurements are generally made in times of drought or flood to give better areal coverage to those events. Those measurements and others collected for some special reason are called measurements at miscellaneous sites.

Records collected at partial-record stations are presented in two tables. The first is a table of discharge measurements at low-flow partial-record stations and the second is a table of annual maximum stage and discharge at crest-stage stations. Discharge measurements made at miscellaneous sites for both low flow and high flow are given in a third table.

Low-flow partial-record stations

Measurements of streamflow in Alaska made at low-flow partial-record stations are given in the following table. These measurements were made during periods of base flow when streamflow is primarily from ground-water storage. These measurements, when correlated with the simultaneous discharge of a nearby stream when continuous records are available, will give a picture of the low-flow potentiality of a stream. For some stations, measurements made periodically through the year are also included. The column headed "Period of record" shows the water years in which measurements were made at the same, or practically the same, site.

Discharge measurements made at low-flow partial-record stations during water year 1986

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Measurements Date	Measurements Discharge (ft³/s)
		Southeast Alaska				
#15045900	Rhine Creek near Juneau	Lat 58°12'27", long 134°09'54", in NE¼ SW¼ sec.20, T.42 S., R.69 E., City and Borough of Juneau, Tongass National Forest, at footbridge 300 ft upstream from mouth, and 11 miles southeast of Juneau.	4.42	1967-68, 1985-86	10-25-85	20
					11-22-85	7.8
					12-12-85	4.2
					1-27-86	26
					3-12-86	15
					5-02-86	39
					5-19-86	30
					7-16-86	45
					8-21-86	28
					9-16-86	13
#15046000	Grindstone Creek near Juneau	Lat 58°12'31", long 134°10'34", in SW¼ SW¼ sec.20, T.42 S., R.69 E., City and Borough of Juneau, Tongass National Forest, at mouth, and 11 miles southeast of Juneau.	3.77	1916-21‡, 1967, 1968, 1985-86	11-01-85	23
					11-22-85	14
					12-12-85	7.9
					1-27-86	29
					3-12-86	17
					5-02-86	29
					5-19-86	29
					7-16-86	32
					8-21-86	44
					9-16-86	16
#15047940	Little Sheep Creek near Juneau	Lat 58°14'39", long 134°17'35", in SE¼ NE¼ sec.9, T.42 S., R.68 E., City and Borough of Juneau, at trail footbridge, 500 ft upstream from mouth, and 6.3 mi southeast of Juneau.	0.59	1968, 1986	6-26-86	7.6
					7-23-86	15
					8-18-86	8.2
					9-17-86	1.3
#15048000	Sheep Creek near Juneau	Lat 58°16'30", long 134°18'50", in SE¼ NE¼ sec.32, T.41 S., R.67 E., City and Borough of Juneau, 1.0 mi upstream from mouth at Gastineau Channel, and 4.0 mi southeast of Juneau.	4.57	1911-14‡, 1916-21‡, 1946-73‡, 1985-86	10-16-85	62
					11-25-85	11
					12-13-85	8.7
					1-09-86	24
					2-11-86	18
					3-13-86	24
					4-23-86	18
					5-13-86	28
					6-25-86	117
					7-22-86	107
					8-18-86	71
					9-17-86	25
#15052549	Steep Creek at footbridge near Auke Bay	Lat 58°24'46", long 134°32'10", in NE¼ SE¼ sec.8, T.40 S., R.66 E., City and Borough of Juneau, Tongass National Forest, at footbridge near Mendenhall Glacier visitors center, 1.5 mi upstream from mouth, and 4.3 mi northeast of Auke Bay.	1.62	1985-86	10-16-85	12
					11-20-85	2.5
					12-16-85	4.9
					1-06-86	4.2
					2-10-86	2.4
					3-07-86	4.0
					4-17-86	2.7
					5-13-86	4.2
					6-12-86	23
					7-18-86	11
					8-13-86	26
					9-15-86	4.1

# See analyses of samples collected at water-quality partial-record stations.
‡ Operated as a continuous-record gaging station.
Note: If the water years prior to 1985 are not footnoted in the Period of record, the results were published as miscellaneous measurements.

					Measurements	
Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Date	Discharge (ft³/s)
		Southeast Alaska--Continued				
#15052780	Montana Creek above McGinnis Creek near Auke Bay	Lat 58°26'26", long 134°38'42", in SW¼ SW¼ sec.35, T.39 S., R.65 E., City and Borough of Juneau, Tongass National Forest, 500 ft upstream from McGinnis Creek, and 3.6 mi north of Auke Bay. (Measurements published in WDR Ak-85-1 for 1-30, 3-12, 4-09, and 5-14, 1985 were in error. See Station 15052792)	3.59	1961, 1963, 1985-86	10-16-85	17
					11-19-85	5.8
					12-16-85	28
					1-07-86	24
					2-10-86	6.9
					3-11-86	11
					4-11-86	11
					5-12-86	18
					6-12-86	17
					7-18-86	7.7
					8-13-86	50
					9-15-86	5.3
#15052790	McGinnis Creek near Auke Bay	Lat 58°26'26", long 134°38'40", in NW¼ SW¼ sec.35, T.39 S., R.65 E., City and Borough of Juneau, Tongass National Forest, 100 ft upstream from mouth, and 3.6 mi north of Auke Bay. (Measurements published in WDR Ak-85-1 for 1-30, 3-12, 4-09, and 5-14, 1985 were in error. See Station 15052793)	7.48	1961, 1963, 1967-68, 1985-86	10-16-85	45
					11-19-85	11
					12-16-85	25
					1-07-86	30
					2-10-86	11
					3-11-86	15
					4-11-86	11
					5-12-86	27
					6-12-86	58
					7-18-86	104
					8-13-86	213
					9-15-86	28
15052792	Montana Creek below McGinnis Creek near Auke Bay	Lat 58°26'11", long 134°38'17", in NE¼ NW¼ sec.2, T.40 S., R.65 E., City and Borough of Juneau, Tongass National Forest, 0.4 mi downstream from McGinnis Creek and 3.2 mi north of Auke Bay. (Discharge and water-quality data erroneously published in WDR Ak-85-1 as being at Station 15052780.)	a11.5	1985	1-30-85	37
					3-12-85	18
					4-09-85	40
					5-14-85	65
15052793	Montana Creek tributary below McGinnis Creek near Auke Bay	Lat 58°26'14", long 134°38'14", in NE¼ NW¼ sec.2, T.40 S., R.65 E., City and Borough of Juneau, Tongass National Forest, at mouth 3.2 mi north of Auke Bay. (Discharge and water-quality data erroneously published in WDR AK-85-1 as being at Station 15052790.)	u	1985	1-30-85	3.0
					3-12-85	2.1
					4-09-85	3.7
					5-14-85	5.5
#15054098	Peterson Creek at Glacier Highway near Auke Bay	Lat 58°29'12", long 134°46'30", in SE¼ SW¼ sec.13, T.39 S., R.64 E., City and Borough of Juneau, at Glacier Highway bridge 0.7 mi upstream from Salt Lake, and 8.4 mi northwest of Auke Bay.	8.85	1948-51, 1957, 1967-68, 1985-86	10-16-85	21
					11-19-85	8.6
					12-16-85	19
					1-06-86	14
					2-10-86	8.3
					3-07-86	15
					4-11-86	16
					5-12-86	33
					6-12-86	14
#15108550	Tributary to Stephens Passage near Douglas	Lat 58°15'02" long 134°37'28", in SW¼ SE¼ sec.4, T.42 S., R.66 E., City and Borough of Juneau, on Douglas Island, Tongass National Forest, 0.2 mi upstream from mouth, and 8.1 mi southwest of Juneau.	2.78	1967, 1985-86	11-01-85	4.5
					11-21-85	2.1
					12-12-85	1.2
					1-27-86	10
					3-12-86	6.7
					5-02-86	18
					5-20-86	33
					7-17-86	7.3
					8-21-86	8.2
					9-16-86	2.2
#15108600	Hilda Creek near Douglas	Lat 58°13'38", long 134°29'50", in NE¼ SW¼ sec.17, T.42 S., R.67 E., City and Borough of Juneau, on Douglas Island, Tongass National Forest, 0.25 mi upstream from mouth, and 5.5 mi southwest of Douglas.	2.62	1966-71‡, 1985-86	11-01-85	17
					11-21-85	4.8
					12-12-85	e4.9
					1-27-86	52
					3-12-86	28
					5-02-86	60
					5-20-86	89
					7-17-86	13
					8-21-86	13
					9-16-86	2.6

# See analyses of samples at water-quality partial-record stations.
‡ Operated as a continuous-record gaging station.
a Approximately.
e Estimate.
u Unknown.
Note: If the water years prior to 1985 are not footnoted in the Period of record, the results were published as miscellaneous measurements.

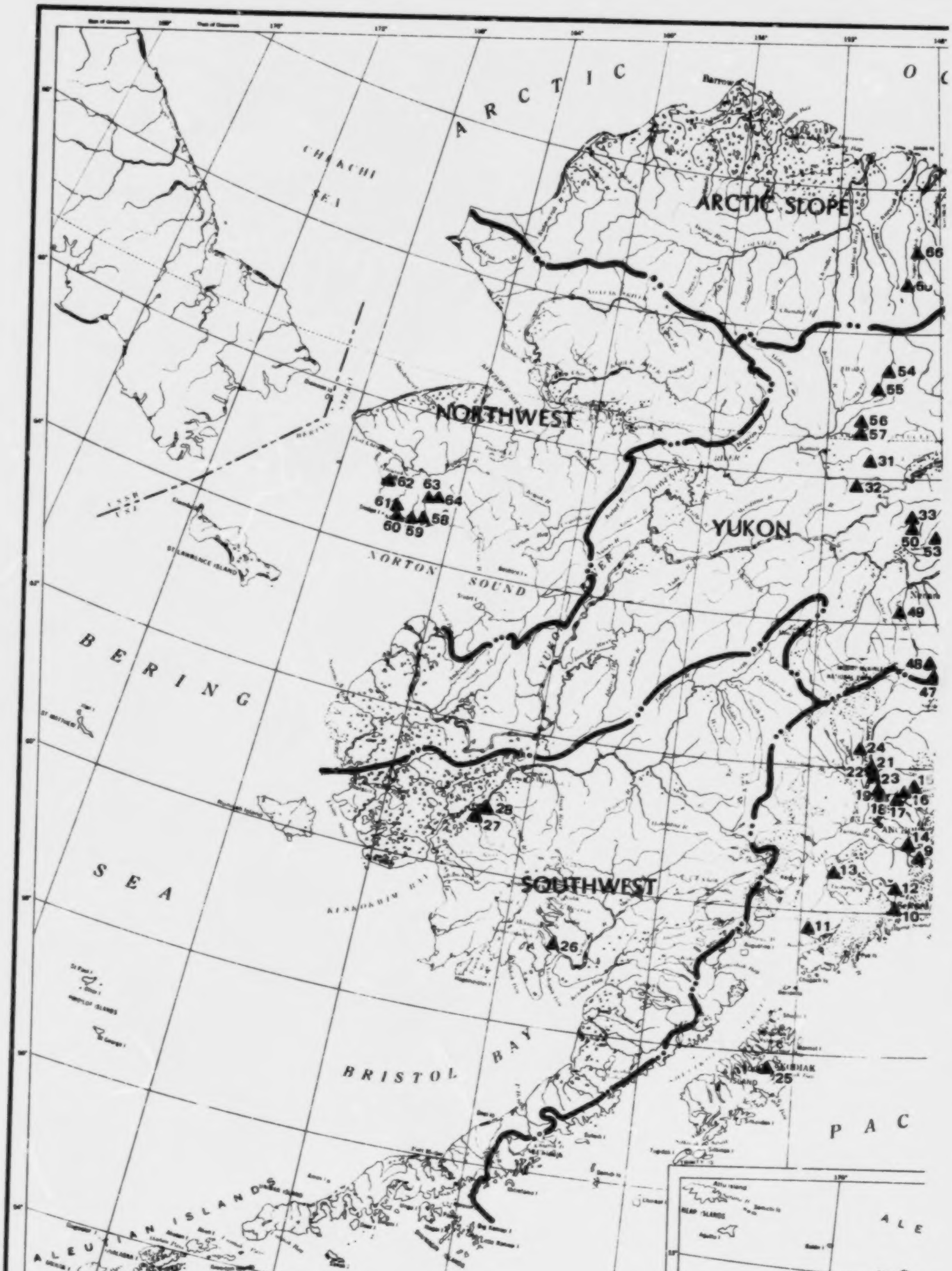
Discharge measurements at low-flow partial-record stations during water year 1986--Continued

Southeast Alaska--Continued

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Measurements	
					Date	Discharge (ft³/s)
#15108709	Bullion Creek above mouth near Douglas	Lat 58°14'35", long 134°20'26", in SW¼ NW¼ sec.8, T.42 S., R.68 E., City and Borough of Juneau, on Douglas Island, Tongass National Forest, 0.3 mi upstream from mouth, and 3.0 mi southeast of Douglas.	1.13	1985-86	10-25-85	4.7
					11-22-85	1.1
					12-12-85	1.4
					1-27-86	8.5
					3-12-86	5.9
					5-02-86	11
					5-19-86	13
					7-16-86	4.6
					8-21-86	6.5
					9-16-86	1.9
#15108788	Lawson Creek above Bear Creek diversion dam near Douglas	Lat 58°16'33", long 134°25'25", in NE¼ NE¼ sec.34, T.41 S., R.67 E., City and Borough of Juneau, on Douglas Island, Tongass National Forest, 0.2 mi upstream from Bear Creek diversion dam, 1.0 mi upstream from mouth, and 1.5 mi northwest of Douglas.	2.75	1985-86	10-16-85	12
					11-15-85	4.9
					12-17-85	26
					1-08-86	14
					2-12-86	4.1
					3-13-86	14
					4-22-86	12
					5-14-86	22
					6-25-86	21
					7-24-86	57
					8-27-86	7.5
					9-17-86	2.4
#15108818	Kowee Creek (Treadwell Ditch footbridge) near Juneau	Lat 58°17'12", long 134°27'04", in SW¼ NW¼ sec.27, T.41 S., R.67 E., City and Borough of Juneau, on Douglas Island, Tongass National Forest, at Treadwell Ditch footbridge, 1.0 mi upstream from mouth, and 1.5 mi southwest of Juneau.	1.96	1985-86	10-16-85	11
					11-15-85	3.8
					12-17-85	14
					1-08-86	4.8
					2-12-86	2.5
					3-13-86	7.3
					4-22-86	5.4
					5-14-86	16
					6-26-86	17
					7-21-86	2.4
					8-19-86	9.1
					9-18-86	1.1
#15108950	Fish Creek tributary at Eaglecrest Road near Juneau	Lat 58°17'45", long 134°32'40", in SW¼ SE¼ sec.24, T.41 S., R.66 E., City and Borough of Juneau, on Douglas Island, Tongass National Forest, at culvert on Eaglecrest Road, 0.3 mi upstream from mouth, and 4.8 mi west of Juneau.	2.33	1985-86	10-17-85	25
					11-18-85	3.1
					12-13-85	1.9
					1-09-86	5.7
					2-13-86	2.2
					3-06-86	5.9
					4-15-86	2.0
					5-15-86	11
					6-13-86	28
					7-22-86	16
					8-19-86	13
					9-17-86	2.2
#15108990	Fish Creek tributary (lower) below confluence near Juneau	Lat 58°18'46", long 134°33'30" in NW¼ SW¼ sec.13, T.41 S., R.66 E., City and Borough of Juneau, on Douglas Island, Tongass National Forest, upstream from mouth at tributary (formed just upstream by confluence), 0.3 mi west of Eaglecrest Road, 0.5 mi upstream from Fish Creek, and 5.2 mi west of Juneau.	0.50	1985-86	10-17-85	7.1
					11-20-85	no flow
					12-13-85	0.43
					1-09-86	1.0
					2-13-86	0.27
					3-06-86	0.64
					4-15-86	0.31
					5-15-86	1.1
					6-13-86	0.60
					7-22-86	0.12
					8-19-96	1.2
					9-17-86	0.11
#15109045	Peterson Creek tributary near Douglas	Lat 58°16'50", long 134°39'32", in SE¼ SW¼ sec.29, T.41 S., R.66 E., City and Borough of Juneau, on Douglas Island, Tongass National Forest, 300 ft upstream from mouth, 7.3 mi south of Auke Bay, and 9.5 mi west of Douglas.	0.90	1985-86	10-16-85	2.0
					11-18-85	0.60
					12-13-85	0.25
					1-09-86	3.8
					2-13-86	1.0
					3-06-86	1.8
					4-15-86	0.87
					5-15-86	2.6
					6-13-86	2.7
					7-22-86	1.2
					8-18-86	3.4
					9-17-86	0.29

# See analyses of samples at water-quality partial-record stations.

Note: If the water years prior to 1985 are not footnoted in the Period of record, the results were published as miscellaneous measurements.



Base from U.S. Geological Survey Alaska Map A

Figure 5. -- Locations of crest-stage partial-records stations.

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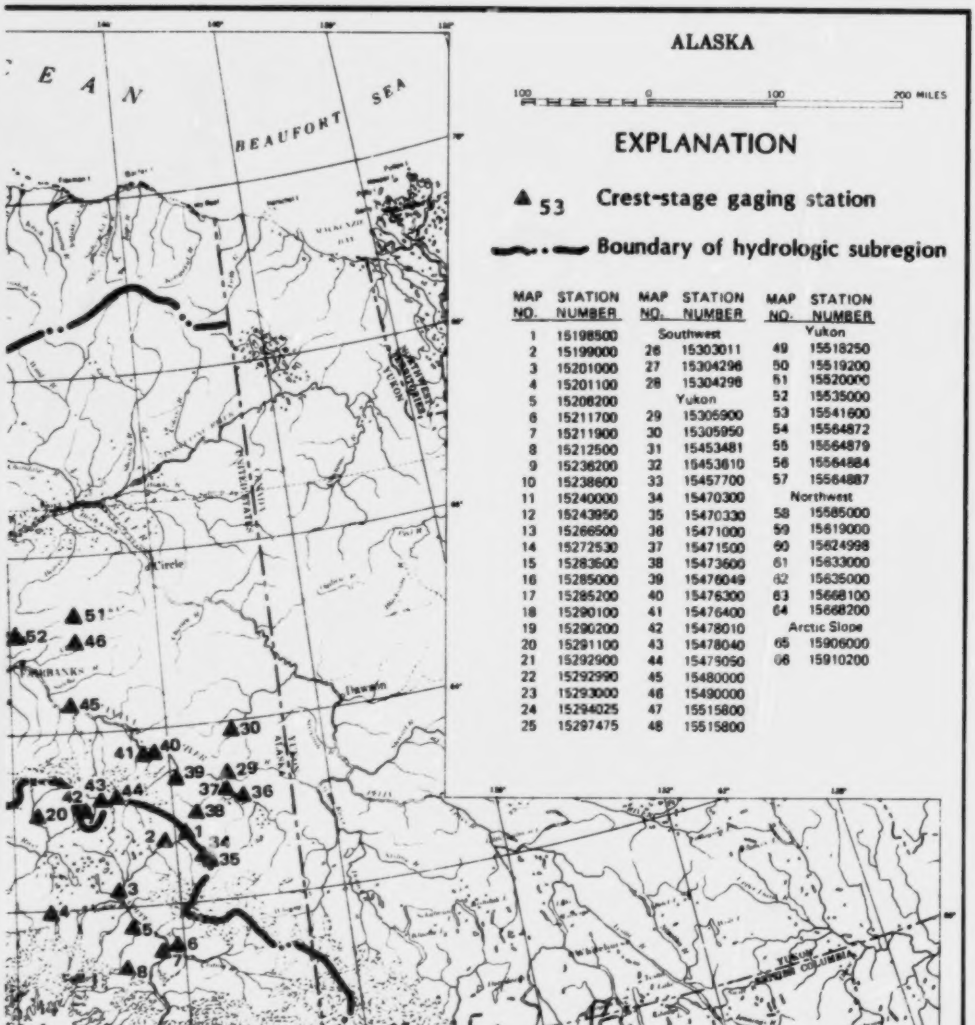

MAP NO.	STATION NUMBER	MAP NO.	STATION NUMBER	MAP NO.	STATION NUMBER
1	15198500	Southwest		Yukon	
2	15199000	26	15303011	49	15518250
3	15201000	27	15304296	50	15519200
4	15201100	28	15304298	51	15520000
5	15208200	Yukon		52	15535000
6	15211700	29	15305900	53	15541600
7	15211900	30	15305950	54	15564872
8	15212500	31	15453481	55	15564879
9	15236200	32	15453610	56	15564884
10	15238600	33	15457700	57	15564887
11	15240000	34	15470300	Northwest	
12	15243950	35	15470330	58	15585000
13	15266500	36	15471000	59	15619000
14	15272530	37	15471500	60	15624998
15	15283600	38	15473600	61	15633000
16	15285000	39	15476049	62	15635000
17	15285200	40	15476300	63	15668100
18	15290100	41	15476400	64	15668200
19	15290200	42	15478010	Arctic Slope	
20	15291100	43	15478040	65	15906000
21	15292900	44	15479050	66	15910200
22	15292990	45	15480000		
23	15293000	46	15490000		
24	15294025	47	15515800		
25	15297475	48	15515800		

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The following table contains annual maximum discharge for crest-stage stations. A crest-stage gage is a device which will register the peak stage occurring between inspections of the gage. A stage-discharge relation for each gage is developed from discharge measurements made by indirect measurements of peak flow or by current meter. The date of the maximum discharge is not always certain, but is usually determined by comparison with nearby continuous-record stations, weather records, or local inquiry. Only the maximum discharge for each water year is given. Information on some lower floods may have been obtained, but is not published herein. The years given in the period of record represent water years for which the annual maximum has been determined.

Annual maximum discharge at crest-stage gage partial-record stations during water year 1986

					Annual maximum		
Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Date	Gage height (ft)	Discharge (ft³/s)
		South-Central Alaska					
15198500	Station Creek near Mentasta	Lat 62°55'56", long 143°40'06", in SE¼ sec.3, T.13 N., R.9 E., on right bank 10 ft upstream from culvert, 1 mi west of Slana-Tok Highway, and 4 mi east of Mentasta.	15.3	1970-77, 1979-86	6- -86	10.46	160
15199000	Copper River tributary near Slana	Lat 62°43'03", long 144°14'21", in SW¼ sec.23, T.11 N., R.6 E., on left bank 300 ft below culvert at mi 51.8 on the Slana-Tok Highway and 9 mi west of Slana.	4.32	1963-86	7-31-85 6- -86	8.64 8.59	r117 113
15201000	Dry Creek near Glennallen	Lat 62°08'49", long 145°28'31", in NE¼ sec.7, T.4 N., R.1 W., on right bank 500 ft upstream from culvert at mi 119 Richardson Highway and 3.3 mi north of Glennallen.	11.4	1963-86	5- -86	17.58	270
15201100	Little Nelchina River tributary near Eureka Lodge	Lat 61°59'17", long 147°00'34", in NW¼ sec.2, T.2 N., R.10 W., Matanuska-Susitna Borough, on right bank at mi 132 Glenn Highway and 6 mi northeast of Eureka Lodge.	7.81	1965-86	6- 1-86	10.81	53
15208200	Rock Creek near Tonsina	Lat 61°45'32", long 145°09'14", in NW¼ sec.25, T.1 S., R.1 E., on right bank at mi 86.1 Richardson Highway, and 6.7 mi north of Tonsina Lodge.	14.3	1966-86	5-27-86	12.69	150
15211700	Strelna Creek near Chitina	Lat 61°30'40", long 144°04'00", in NE¼ sec.22, T.4 S., R.7 E., 15 ft upstream from culvert on Chitina-McCartny Road and 13 mi east of Chitina.	23.8	1971-86	8-12-85 8-22-86	r26.57 23.74	g670 315
15211900	O'Brien Creek near Chitina	Lat 61°28'59", long 144°27'23", in NW¼NW¼ sec.35, T.4 S., R.5 E., 100 ft upstream from timber bridge on trail to Copper River gaging station, 0.1 mi upstream from mouth at Copper River, and 2.5 mi south of Chitina.	44.8	1970-82, 1984-86	5-27-86	2.98	1,260
15212500	Boulder Creek near Tiekel	Lat 61°20'08", long 145°18'26", in NW¼ sec.19, T.6 S., R.1 E., on left downstream wingwall at mi 51.4 Richardson Highway, and 0.7 mi north of Tiekel.	9.80	1964-86	6-26-83 7- -85 5-27-86	10.23 10.01 10.16	r180 r125 160
15236200	Shakespeare Creek at Whittier	Lat 60°46'35", long 148°43'35", in NE¼ sec.22, T.8 N., R.4 E., on upstream right wingwall of concrete bridge 0.5 mi upstream from mouth, and 1.8 mi west of the Alaska railroad terminal building at Whittier.	r1.61	1970-80, 1984-86	8-26-86	11.25	405
15238600	Spruce Creek near Seward	Lat 60°04'10", long 149°27'08", Kenai Peninsula Borough, on left bank 0.7 mi upstream from mouth at Resurrection Bay and 2.4 mi south of Seward.	9.26	1966, ‡1967-79, 1980-86	8-27-86	7.24	2,100
15240000	Anchor River at Anchor Point	Lat 59°46'21", long 151°50'05", in NW¼SE¼ sec.4, T.5 S., R.15 W., Kenai Peninsula Borough, at Old Sterling Highway bridge at Anchor Point, 0.1 mi downstream from North Fork and 1.0 mi upstream from mouth.	224	‡1953-66, 1984-86	9-20-86	4.98	3,600

‡ Operated as a continuous-record station.
g Not previously published.
r Revised.

South-central Alaska--Continued

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	 Gage height (ft)	 Dis-charge (ft³/s)
15243950	Porcupine Creek near Primrose	Lat 60°20'30", long 149°22'15". in NE¼ sec.24, T.3 N., R.1 W., Kenai Peninsula Borough, on right bank at 18-mi Campground Road, 0.2 mi upstream from mouth at Kenai Lake and 0.8 mi west of Primrose.	16.8	1963-86	9-18-82 9-21-86	w13.44 10.98	r3,350 755
15266500	Beaver Creek near Kenai	Lat 60°33'50", long 151°07'03", in SE¼ sec.36, T.6 N., R.11 W., Kenai Peninsula Borough, on left bank 20 ft upstream from culvert on Kenai-Soldotna Road, 2.0 mi upstream from mouth, and 4.5 mi east of Kenai.	a51.0	‡1968-78, 1980-83, 1985-86	4-29-76 4-26-77 4-10-80 4- -81 5- 2-85 4- -86	d1.98 d3.06 d2.48 d2.20 r5.47 3.92	r158 r500 r300 r215 r265 105
15272530	California Creek at Girdwood	Lat 60°57'45", long 149°08'23", in NW¼ sec.17, T.10 N., R.2 E., Municipality of Anchorage, at culverts on Alyeska Highway, 0.2 mi west of Girdwood Post Office, and 2.0 mi northeast of Seward-Anchorage Highway.	6.96	1967-84, 1986	6-17-86	14.79	117
15283500	Eska Creek near Sutton	Lat 61°43'44", long 148°54'31", in NE¼ sec.21, T.19 N., R.3 E., Matanuska-Susitna Borough, on right bank 100 ft downstream from culverts on Eska-Jonesville Road and 1.5 mi northeast of Sutton.	13.4	1966, 1971-86	9-21-86	6.80	240
15285000	Wasilla Creek near Palmer	Lat 61°38'47", long 149°11'45", in SW¼ sec.13, T.18 N., R.1 E., Matanuska-Susitna Borough, on left bank 60 ft upstream from culvert entrance on Wasilla Fishhook Road and 4.1 mi northeast of Palmer.	16.8	1971, 1976-86	7-21-86	10.36	171
15285200	Wasilla Creek near Wasilla	Lat 61°36'09", long 149°18'50", in NE¼NW¼ sec.17, T.17 N., R.1 E., Matanuska-Susitna Borough, on left bank, 20 ft downstream from Parks Highway bridge, 4.2 mi east of Wasilla.	39.5	1980-86	7-21-86	3.01	170
15290100	Little Susitna River near Houston	Lat 61°37'36", long 149°48'03", in NE¼NW¼ sec.27, T.18 N., R.3 W., Matanuska-Susitna Borough, on right bank, 300 ft downstream from Parks Highway bridge and 1.6 mi east of Houston.	168	1980-81, 1984-86	9-21-86	12.97	2,300
15290200	Nancy Lake tributary near Willow	Lat 61°41'17", long 149°57'58", in SE¼ SE¼ sec.34, T.19 N., R.4 W., Matanuska-Susitna Borough, 10 ft upstream from culvert at Parks Highway, 0.3 mi upstream from mouth, and 4.5 mi southeast of Willow	8.00	1980, 1983-86	9-20-86	10.80	72
15291100	Raft Creek near Denali	Lat 63°03'04", long 147°16'22", in SE¼ sec.36, T.21 S., R.2 E., Matanuska-Susitna Borough, on right bank upstream from culverts at mi 69.2 Denali Highway and 10.7 mi southeast of Denali.	4.33	1963-86	7-18-86	10.56	80
15292900	Goose Creek near Montana	Lat 62°03'42", long 150°03'20", in NW¼ NW¼ sec.29, T.23 N., R.4 W., Matanuska-Susitna Borough, on right bank, 15 ft downstream from culvert on Parks Highway, 1.5 mi south of Montana, and 23 mi north of Willow.	m	1963-71, 1984-86	9-20-86	2.87	990
15292990	Sheep Creek near Willow	Lat 61°59'45", long 150°02'43", in NE¼ SW¼ sec.17, T.22 N., R.4 W., Matanuska-Susitna Borough, on right bank, 175 ft downstream from Parks Highway bridge, 6.5 mi south of Montana, and 18 mi north of Willow	m	1984-86	9-20-86	2.31	1,480

‡ Operated as a continuous-record station.
a Approximately.
d At different site and datum.
m Drainage area undefined due to cross-drainage flow from Sheep Creek to Goose Creek.
r Revised.
w Backwater.

Annual maximum discharge at crest-stage gage partial-record stations during water year 1986--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum Date	Gage height (ft)	Discharge (ft^3/s)
		South-central Alaska--Continued					
15293000	Caswell Creek near Caswell	Lat 61°56'55", long 150°03'14", in SW¼ sec.32, T.22 N., R.4 W., Matanuska-Susitna Borough, downstream from culvert on Parks Highway and 2.3 mi south of Caswell.	19.6	1963-86	5- -85 9-24-86	12.50 11.57	r152 61
15293700	Little Willow Creek near Kashwitna	Lat 61°48'37", long 150°05'42", in SW¼NE¼ sec.24, T.20 N., R.5 W., Matanuska-Susitna Borough, on left bank, 100 ft downstream from Parks Highway bridge, 0.4 mi downstream from Rogers Creek, and 3.7 mi south of Kashwitna.	155	1980-86	8-12-85 9-20-86	13.30 12.36	r2,500 1,550
15294025	Moose Creek near Talkeetna	Lat 62°19'00", long 150°26'30", in NE¼ sec.30, T.26 N., R.7 W., Matanuska-Susitna Borough, at bridge on Petersville Road and 10.5 mi west of Talkeetna.	52.3	1972-86	5-27-85 9-20-86	25.82 25.74	r1,550 1,480
15297475	Red Cloud Creek tributary near Kodiak	Lat 57°49'00", long 152°37'20", in SW¼ sec.24, T.27 S., R.21 W., Kodiak Island Borough, 0.1 mi upstream from mouth and 8.4 mi northwest of Kodiak.	1.51	1963-86	12-10-85 6-12-86	12.13 12.13	240 240
		Southwest Alaska					
15303011	Wood River tributary near Aleknagik	Lat 59°12'26", long 158°40'02", in NE¼ SW¼ sec.23, T.11 S., R.56 W., on left bank 100 ft downstream from road culvert, 4.5 mi upstream from Wood River and 5.5 mi southwest of Aleknagik.	3.35	1985-86	10- 8-85	7.01	n
15304296	Browns Creek tributary near Bethel	Lat 60°47'33", long 161°49'40", in SE¼ sec. 12, T.8 N., R.72 W., on left bank 2 ft upstream from culvert on Bethel State Highway and 2.1 mi southwest of Bethel.	0.28	1985-86	4- -86	f19.10	e0.5
15304298	Browns Creek at Bethel	Lat 60°47'56", long 161°46'25", in SW¼ NE¼ sec.8, T.8 N., R.71 W., 10 ft upstream from culverts on Ridgecrest Drive at Bethel.	10.5	‡1985, 1986	8-23-86	34.80	126
		Yukon Alaska					
15305900	Dennison Fork near Tetlin Junction	Lat 63°25'24", long 142°29'00", in SW¼ sec.14, T.19 N., R.15 E., on right bank 10 ft upstream from culvert at mi 10.7 Taylor Highway and 8.3 mi northeast of Tetlin Junction.	2.93	1964-86	6- -86	11.41	24
15305950	Taylor Creek near Chicken	Lat 63°54'27", long 142°12'58", in NW¼ sec.35, T.25 N., R.16 E., on right bank 29 ft upstream from bridge at mi 50.3 Taylor Highway and 14.5 mi southwest of Chicken.	38.4	1967-86	7- 7-86	10.74	67
15453481	West Fork Dall River tributary near Stevens Village	Lat 66°17'53", long 150°23'10", in SW¼ sec.17, T.17 N., R.13 W., on left bank 20 ft upstream from culvert on Dalton Highway, 2.3 mi upstream from mouth, and 43 mi northwest of Stevens Village.	4.18	1981-86	9- -83 6- -84 5-29-85 6-10-86	11.73 13.01 13.46 12.18	g40 g107 g136 60
15453610	Ray River tributary near Stevens Village	Lat 65°56'57", long 150°55'00", in SE¼ sec.17, T.13 N., R.11 W., on right bank 10 ft upstream from culvert on TAPS haul road and 22 mi west of Stevens Village.	8.00	1977-86	6-13-86	16.47	34

‡ Operated as a continuous-record station.
e Estimate.
f Flow over ice.
g Not previously published.
n To be determined.
r Revised.

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	Annual maximum Gage height (ft)	Annual maximum Dis-charge (ft³/s)
		Yukon Alaska--Continued					
15457700	Erickson Creek near Livengood	Lat 65°34'30", long 148°56'18", in SE¼ sec.26, T.9 N., R.7 W., at culvert at mi 12.5 on the TAPS haul road and 12.5 mi northwest of Livengood.	26.3	1973-86	6-13-86	18.61	175
15470300	Little Jack Creek near Nabesna	Lat 62°32'47", long 143°19'30", in SE¼ sec.22, T.9 N., R.11 E., on left bank 0.2 mi upstream from wooden bridge at mi 25.8 Nabesna Road and 15.6 mi northwest of Nabesna.	6.73	1975-86	6- -86	16.57	n
15470330	Chalk Creek near Nabesna	Lat 62°30'19", long 143°09'24", in NE¼ sec.3, T.8 N., R.12 E., on right bank 0.1 mi upstream from wooden bridge at mi 32.3 Nabesna Road and 10.3 mi northwest of Nabesna.	14.8	1975-86	7- -86	16.17	74
15471000	Bitters Creek near Northway Junction	Lat 63°09'38", long 142°05'20", in SE¼ sec.13, T.16 N., R.17 E., on left bank 52 ft upstream from culvert at mi 1,280 Alaska Highway 1 mi upstream from mouth at Tanana River and 13.5 mi northwest of Northway Junction.	15.4	1964-86	7- 7-86	11.50	47
15471500	Tanana River tributary near Tetlin Junction	Lat 63°16'45", long 142°30'27", in SE¼ sec.3, T.17 N., R.15 E., on left bank 6 ft upstream from culvert at mi 1,297.8 Alaska Highway and 3.7 mi southeast of Tetlin Junction.	2.43	1965-86	5- -82 7- 7-86	12.08 12.04	r18 17
15473600	Log Cabin Creek at Log Cabin Inn	Lat 63°01'48", long 143°20'36", on right bank 20 ft upstream from bridge at mi 97.4 on the old section of the Slana-Tok Highway and 24.9 mi southwest of Tok.	10.7	1966-86	8- -81 6- -84 r7-31-85 7- -86	r11.19 10.72 11.24 11.30	r329 r150 371 380
15476049	Tanana River tributary near Cathedral Rapids	Lat 63°24'24", long 143°48'28", in SE¼ sec.23, T.19 N., R.8 E., on left bank 0.3 mi upstream from culvert at mi 1,341 Alaska Highway 0.6 mi upstream from mouth at Tanana River and 2.5 mi northwest of Cathedral Rapids.	3.09	1970, 1973-86	7-27-84 r7-31-85 7- -86	14.60 14.02 13.89	r159 r84 75
15476300	Berry Creek near Dot Lake	Lat 63°41'23", long 144°21'47", in NW¼ sec.13, T.22 N., R.5 E., on left bank 100 ft upstream from bridge at mile 1,371.4 on Alaska Highway, 1.9 mi upstream from mouth, and 6.0 mi west of Dot Lake.	65.1	1963-71, ‡1972-81, 1983-86	7-21-86	11.52	h312
15476400	Dry Creek near Dot Lake	Lat 63°41'32", long 144°34'16", in NW¼ sec.24, T.14 S., R.16 E., on piling near right bank 64 ft upstream from bridge at mi 1,378.1 Alaska Highway 0.6 mi upstream from mouth at Tanana River 15.7 mi west of Dot Lake.	57.6	1964-65, ‡1966-69, 1970-86	6-23-86	14.11	1,030
15478010	Rock Creek near Paxson	Lat 63°04'16", long 146°06'17", in NW¼ sec.30, T.21 S., R.9 E., on right bank 25 ft upstream at mi 24.8 Denali Highway and 18 mi west of Paxson.	50.3	1963-86	7-18-86	11.33	1,000
15478040	Phelan Creek near Paxson	Lat 63°14'27", long 145°28'03", in SW¼ sec.28, T.19 S., R.12 E., on left bank approximately 1 mi downstream from terminus of Gulkana Glacier, and 14.5 mi north of Paxson.	12.2	‡1967-78, 1984-85	8- 4-84 8-15-85	g9.31 g9.46	g580 g690
15478050	McCallum Creek near Paxson	Lat 63°13'27", long 145°38'56", in SW¼ sec.33, T.19 S., R.11 E., on right bank upstream wingwall 8 ft upstream from bridge at mi 202.4 Richardson Highway 0.5 mi upstream from mouth at Phelan Creek and 14.5 mi northwest of Paxson.	15.5	1967-86	6-23-86	11.28	430

‡ Operated as a continuous-record station.
g Not previously published.
h At least this high.
n To be determined.
r Revised.

Station No.	Station Name	Location	Drainage area (mi²)	Period of record	Annual maximum Date	Annual maximum Gage height (ft)	Annual maximum Discharge (ft³/s)
		Yukon Alaska--Continued					
15480000	Banner Creek at Richardson	Lat 64°17'24", long 146°20'56", in SW¼ sec.22, T.7 S., R.7 E., Fairbanks North-Star Borough, on left bank 400 ft upstream from bridge at mi 295.4 Richardson Highway 0.1 mi upstream from mouth at Tanana River and 0.4 mi northwest of Richardson.	20.2	1963-86	8-21-86	14.27	630
15490000	Monument Creek at Chena Hot Springs	Lat 65°03'17", long 146°03'05", in SE¼ sec.26, T.3 N., R.8 E., Fairbanks North-Star Borough , on left bank 800 ft from lodge at Chena Hot Springs, 0.4 mi upstream from unnamed tributary, and 1.3 mi upstream from North Fork Chena River.	26.7	1967, 1970-77, 1979-86	7- -86	26.76	n
15515800	Seattle Creek near Cantwell	Lat 63°19'32", long 148°14'49", on line between sec.25 and 26, T.18 S., R.4 W., Matanuska-Susitna Borough, on left downstream wingwall of bridge at mi 110.9 Denali Highway and 22.4 mi southeast of Cantwell.	36.2	1964-65, ‡1966-75, 1976-77, 1979-86	7-20-86	4.95	310
15516200	Slime Creek near Cantwell	Lat 63°30'34", long 148°48'39", in SE¼ sec.24, T.16 S., R.7 W., on right bank upstream from culvert on Parks Highway and 9.1 mi northeast of Cantwell.	6.90	1966-86	7-20-86	w15.73	570
15518250	Birch Creek near Rex	Lat 64°10'35", long 149°17'26", in SW¼ sec.35, T.8 S., R.9 W., on left bank 20 ft upstream from culvert on the Parks Highway and 4.2 mi south of Rex.	4.10	1965-86	5- -75	10.91	r142
					8-21-86	10.91	142
15519200	Brooks Creek tributary near Livengood	Lat 65°23'02", long 148°56'12", on line between sec.2, T.6 N., R.7 W., and sec.35, T.7 N., R.7 W., on right bank [illegible] ft upstream from culvert at mi [illegible] Elliot Highway and 15 mi southwest of Livengood.	7.81	1964-86	6-13-86	11.99	123
15520000	Idaho Creek near Miller House	Lat 65°21'13", long 146°09'33", in NW¼ sec.17, T.6 N., R.8 E., Fairbanks North-Star Borough, on right bank 100 ft down stream from culverts at mi 79 Steese Highway and 30 mi southwest of Miller House.	5.31	1963-86	6-30-80	15.09	r140
					7- 2-81	14.47	g60
					6-20-82	14.81	g88
					9- -83	14.27	g43
					7- -84	14.84	g103
					5- -85	14.70	g85
					8-21-86	14.93	115
15535000	Caribou Creek near Chatanika	Lat 65°09'00", long 147°33'05", in NW¼ NE¼ sec.28, T.4 N., R.1 E., Fairbanks North-Star Borough, on left bank 2.0 mi upstream from mouth, 3.5 mi northwest of Chatanika, and 21.6 mi north of Fairbanks.	9.19	‡1970-84, 1985-86	5-24-85	g4.24	eg150
					8-21-86	3.75	119
15541600	Globe Creek near Livengood	Lat 65°17'08", long 148°07'56", 0.1 mi upstream from culverts at mi 38 Elliot Highway 9 mi upstream from mouth and 19 mi southeast of Livengood.	23.0	1964-86	8-21-86	14.80	295
15564868	Snowden Creek near Wiseman	Lat 67°44'16", long 149°45'10", in SW¼ sec.26, T.34 N., R.10 N., on right bank 20 ft upstream from culvert on the Dalton Highway and 24.5 mi northeast of Wiseman.	16.7	1968, 1977-86	7- 2-83	26.60	r476
					7- -86	26.50	460
15564872	Nugget Creek near Wiseman	Lat 67°29'25", long 149°52'20", in NW¼ sec.3, T.31 N., R.10 W., on right bank 300 ft upstream from culvert at the Dalton Highway and 8.7 mi northeast of Wiseman.	9.47	1975-86	6- 7-86	16.58	180
15564879	Slate Creek at Coldfoot	Lat 67°15'17", long 150°10'24", in NW¼ sec.15, T.28 N., R.12 W., at bridge on Dalton Highway and at Coldfoot.	73.4	1977, 1980-86	9- 5-86	16.21	640

‡ Operated as a continuous-record station.
e Estimate.
g Not previously published.
n To be determined.
r Revised.
w Backwater.

Annual maximum discharge at crest-stage gage partial-record stations during water year 1986--Continued

Station No.	Station Name	Location	Drainage area (mi^2)	Period of record	Annual maximum		
					Date	Gage height (ft)	Discharge (ft^3/s)
		Yukon Alaska--Continued					
15564884	Prospect Creek near Prospect Camp	Lat 66°46'56", long 150°41'06", in NW¼ sec.31, T.23 N., R.14 W., on left bank 200 ft upstream from bridge on the Dalton Highway, 0.4 mi downstream from TAPS pipeline crossing, 1.5 mi upstream from mouth, and 2.1 mi south of Pump Station 5.	110	1968, 1975-86	6- 7-86	8.06	2,700
15564887	Bonanza Creek tributary near Prospect Camp	Lat 66°36'52", long 150°41'24", in SE¼ sec.25, T.21 N., R.15 W., on right bank 0.3 mi downstream from culverts on the Dalton Highway, 3.4 mi upstream from mouth, and 13.5 mi south of Pump Station 5.	11.7	1975-86	6-10-86	18.42	142
		Northwest Alaska					
15585000	Goldengate Creek near Nome	Lat 64°26'03", long 165°02'46", in SW¼ sec.15, T.12 S., R.32 W., on right bank 500 ft upstream from culvert on Nome-Council Road and 11 mi southeast of Nome.	1.55	1965, 1977-84, 1986	9- 8-65 9-24-78 6- 4-79 6-20-80 6- 2-81 6- -82 5- -83 7-31-84 6- 2-86	d11.7 11.72 11.62 11.15 11.62 11.78 11.89 11.67 11.59	r63 r46 r40 r18 r40 r50 r58 r44 39
15619000	Dexter Creek near Nome	Lat 64°35'11", long 165°16'39", in NE¼ sec.33, T.10 S., R.33 W., on left bank 800 ft upstream from culvert on Nome-Taylor Road 0.2 mi upstream from mouth and 7 mi northeast of Nome.	2.99	1978, 1981-86	8- 1-86	11.77	82
15624998	Arctic Creek above tributary near Nome	Lat 64°38'16", long 165°42'42", in NE¼ sec.8, T.10 S., R.35 W., on right bank 300 ft upstream from culvert on Nome-Teller Road 2 mi upstream from mouth and 13 mi northwest of Nome.	1.13	1975, 1979-86	9-14-86	18.31	56
15633000	Washington Creek near Nome	Lat 64°42'52", long 165°49'13", in NW¼ sec.14, T.9 S., R.35 W., 400 ft upstream from culvert on Nome-Teller Road and 19 mi northwest of Nome.	6.34	1964-86	9- 4-86	21.12	168
15635000	Eldorado Creek near Teller	Lat 64°57'38", long 166°11'59", in NE¼ NE¼ sec.20, T.6 S., R.37 W., on left bank, 30 ft downstream of bridge at mi 46.5 of Nome-Teller Road, 0.5 mi upstream from mouth at Tisuk River and 21 mi south of Teller.	5.83	1986	9- 4-86	9.42	n
15668100	Star Creek near Nome	Lat 64°55'40", long 164°57'39", in NW¼ sec.33, T.6 S., R.31 W., on right bank upstream from culvert at mi 40.5 Nome-Taylor Road 0.9 mi upstream from mouth and 32 mi northeast of Nome.	3.78	1964-65, 1967-86	9- 4-86	12.25	179
15668200	Crater Creek near Nome	Lat 64°55'48", long 164°52'12", in NW¼ NW¼ sec.36, T.6 S., R.31 W., on right bank 25 ft upstream from bridge at mi 43 on Nome-Taylor Road, 1.1 mi upstream from mouth, and 34 mi northeast of Nome.	21.9	1964-65, 1967-75, ‡1976-85, 1986	9- -86	10.17	1,600
		Arctic Slope Alaska					
15906000	Sagavanirktok River tributary near Pump Station 3	Lat 68°41'13", long 149°05'42", in NE¼SW¼ sec.4, T.9 S., R.13 E., North Slope Borough on left bank 30 ft upstream from culverts on Dalton Highway, 16.5 mi upstream from mouth, and 14 mi south of Pump Station 3.	28.4	1979-86	6- -79 7- -80 6- -81 6- -82 6- -83 8- 4-84 6- -86	19.99 19.67 18.54 18.24 r19.47 18.87 19.65	g700 g485 g152 g113 g385 g205 482
15910200	Happy Creek at Happy Valley Camp	Lat 69°08'50", long 148°49'50", in SE¼ sec.30, T.3 S., R.14 E., North Slope Borough, on right bank at former Happy Valley Camp 1 mi upstream from mouth and 17.5 mi south of Sagwon.	34.5	1972-86	6-13-86	17.50	1,020

‡ Operated as a continuous-record station.
d At different datum.
g Not previously published.
n To be determined.
r Revised.

Discharge measurements made at miscellaneous sites during water year 1986

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements	
					Date	Discharge (ft^3/s)
		South-central Alaska				
15201000 Dry Creek near Glenallen	Copper River	Lat 62°08'49", long 145°28'31", in NE¼ sec.7, T.4 N., R.1 W., 500 ft upstream from culvert at mi 119 Richardson Highway and 3.3 mi north of Glennallen.	11.4	c†1963-85	5-19-86	80
15201100 Little Nelchina River tributary near Eureka Lodge	Little Nelchina River	Lat 61°59'17", long 147°00'34", in NW¼ sec.2, T.2 N., R.10 W., Matanuska-Susitna Borough, at culvert at mi 132 Glenn Highway and 6 mi northeast of Eureka Lodge.	7.81	c†1966-85	5- 5-86	34
15208200 Rock Creek near Tonsina	Willow Creek	Lat 61°45'32", long 145°09'14", in NW¼ sec.25, T.1 S., R.1 E., at culvert at mi 86.1 Richardson Highway, and 6.7 mi north of Tonsina Lodge.	14.3	c†1966-85	5-19-86	41
15211700 Strelna Creek near Chitina	Kuskulana River	Lat 61°30'40", long 144°04'00", in NE¼ sec.22, T.4 S., R.7 E., 300 ft upstream from culvert on Chitina-McCarthy Road and 13 mi east of Chitina.	23.8	c†1971-85	7- 7-86	22
					8-28-86	42
15211900 O'Brien Creek near Chitina	Copper River	Lat 61°28'59", long 144°27'23", in NW¼ NW¼ sec.35, T.4 S., R.5 E., 100 ft upstream from timber bridge on trail to Copper River gaging station, 0.1 mi upstream from mouth at Copper River, and 2.5 mi south of Chitina.	44.8	c†1970-85	8-29-86	58
15212500 Boulder Creek near Tiekel	Tiekel River	Lat 61°20'08", long 115°10'20", in NW¼ sec.19, T.6 S., R.1 E., at mi 51.4 on the Richardson Highway, 0.7 mi north of Tiekel.	9.80	c†1964-85	7- 9-86	76
15236200 Shakespeare Creek at Whittier	Passage Channel	Lat 60°46'35", long 148°43'35", in NE¼ sec.22, T.8 N., R.4 E., at bridge 0.5 mi upstream from mouth, and 1.8 mi west of the Alaska railroad terminal building at Whittier.	3.05	c†1969-80, c†1985	10- 2-85	28
					6- 3-86	167
Resurrection River above Exit Glacier near Seward	Resurrection Bay	Lat 60°11'46", long 149°35'17", in NW¼ NW¼ sec.11, T.1 N., R.2 W., Kenai Peninsula Borough, at bridge crossing, 50 ft upstream from Exit Glacier Creek and 8.0 mi northwest of Seward.	106	--	8-15-86	736
					8-21-86	670
					8-29-86	1890
					9- 5-86	764
					9-12-86	816
					9-19-86	783
					9-24-86	526
					9-30-86	319
15238600 Spruce Creek near Seward	Resurrection Bay	Lat 60°04'10", long 149°27'08", Kenai Peninsula Borough, 0.7 mi upstream from mouth at Resurrection Bay and 2.4 mi south of Seward.	9.26	1966, ‡1967-79, c†1980-85	6-11-86	128
					8-20-86	66
China Poot Creek at lake outlet near Homer	Kachemak Bay	Lat 59°32'54", long 151°13'10", in NE¼ NW¼ sec.30, T.7 S., R.11 W., Kenai Peninsula Borough, at lake outlet, 1.0 mi upstream from mouth and 12.0 mi southeast of Homer.	15.1	--	4-29-86	38
15238960 Martin River near Homer	Kachemak Bay	Lat 59°44'31", long 151°00'02", in NW¼ SW¼ sec.16, T.5 S., R.10 W., Kenai Peninsula Borough, 1.6 mi upstream from mouth and 20 mi northeast of Homer.	a22	--	9- 4-86	590
					9-22-86	572
					10- 7-86	209
					10-15-86	1150
15240000 Anchor River at Anchor Point	Cook Inlet	Lat 59°46'21", long 151°50'05", in NW¼ SE¼ sec.4, T.5 S., R.15 W., Kenai Peninsula Borough, at old Sterling Highway Bridge at Anchor Point, 0.1 mi downstream from North Fork and 1.0 mi upstream from mouth.	224	‡1953-66, c†1985-85	5- 1-86	1100

† Operated as a crest-stage partial-record station.
‡ Operated as a continuous-record station.
a Approximately.
c Published in Miscellaneous Measurement Table.

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
		South-central Alaska--Continued				
15243900 Snow River near Seward	Kenai Lake	Lat 60°17'11", long 149°20'19", in SW¼ SE¼ sec.6, T.2 N., R.1 E., Kenai Peninsula Borough, on downstream end of first pier from left bank of the Alaska Railroad bridge, 3.5 mi upstream from mouth at Kenai Lake, and 13 mi north of Seward.	128	c1959-60, ‡1970, ‡1974, ‡1977, c1985	9-30-85 12- 2-85 12- 3-85	g2260 *p12000 *11200
15243950 Porcupine Creek near Primrose	Kenai Lake	Lat 60°20'30", long 149°22'15", in NE¼ sec.24, T.3 N., R.1 W., Kenai Peninsula Borough, at 18-mi campground road, 0.2 mi upstream from mouth at Kenai Lake, and 0.8 mi west of Primrose.	16.8	c†1963-85	6-11-86 8-20-86	187 41
15266500 Beaver Creek near Kenai	Kenai River	Lat 60°33'50", long 151°07'03", in SE¼ sec.36, T.6 N., R.11 W., 75 ft downstream from culvert on Kenai-Soldotna Road, 2.0 mi upstream from mouth and 4.5 mi east of Kenai.	a51.0	‡1968-78, c†1980-83, c†1985	4-28-86	30
15272503 Virgin Creek near Girdwood	Cook Inlet	Lat 60°56'55", long 149°07'27", in NE¼ NE¼ sec.20, T.10 N., R.2 E., Municipality of Anchorage, 0.9 mi southwest of Alyeska, 1.5 mi northeast of Girdwood, and 1.8 mi upstream from mouth.	3.02	c1985	2-25-86	3.0
15272530 California Creek at Girdwood	Glacier Creek	Lat 60°57'45", long 149°08'23", in NW¼ sec.17 T.10 N., R.2 E., Municipality of Anchorage, at culverts on Alyeska Highway, 0.25 mi west of Girdwood Post Office and 2.0 mi northeast of Seward-Anchorage Highway.	6.96	c†1968-78, †1979, c†1980, †1981-83, c†1984-85	2-25-86 6-23-86	0.76 50
15272550 Glacier Creek at Girdwood	Cook Inlet	Lat 60°56'29", long 149°09'44", in SE¼ sec.19, T.10 N., R.2 E., Municipality of Anchorage, at railroad bridge, 0.2 mi upstream from mouth, and 0.2 mi southeast of Girdwood.	62.0	‡1965-78, c1985	2-25-86	44
+Campbell Creek above Little Campbell Creek	Cook Inlet	Lat 61°09'22", long 149°52'26", in NW¼ SE¼ sec.6, T.12 N., R.3 W., Municipality of Anchorage, 500 ft above the confluence with Little Campbell Creek and 4.4 mi south of Anchorage.	--	c1977, c1980-81	4-23-86 4-24-86 6-16-86 9- 8-86	18 20 120 90
+15274490 Little Campbell Creek at Woodbourne Drive	Campbell Creek	Lat 61°06'55", long 149°42'51", in NE¼ NE¼ sec.24, T.12 N., R.3 W., Municipality of Anchorage, at Woodbourne Drive and 9.1 mi southeast of Anchorage.	--	--	6-10-86 6-25-86 7-14-86 7-28-86 8-11-86 8-25-86 9-10-86 9-24-86	0.50 .40 .35 .38 .39 .48 .45 1.1
+15274495 Little Campbell Creek at Hillside Drive	Campbell Creek	Lat 61°06'59", long 149°44'33", in SE¼ NE¼ sec.23, T.12 N., R.3 W., Municipality of Anchorage, at Hillside Drive and 8.6 mi southeast of Anchorage.	--	c1980-81	7-28-86 8-11-86 8-25-86 9-10-86 9-24-86	0.72 .76 .86 .77 1.6
+15274500 Little Campbell Creek	Campbell Creek	Lat 61°07'14", long 149°46'15", in NW¼ NW¼ sec.23, T.12 N., R.3 W., Municipality of Anchorage, at Birch Road and 7.4 mi southeast of Anchorage.	2.68	1968, c1980	(Listed below)	

8- 8-68	g.61	6-10-86	.79	7-28-86	.73	8-25-86	.97	9-23-86	4.1
9-13-68	g.51	6-25-86	.58	8-11-86	.85	9- 9-86	1.4	9-24-86	2.4
6- 5-86	.98	7-14-86	1.0	8-13-86	3.7				

* Breakout of Snow River glacier-dammed lake.
† Operated as a crest-stage partial-record station.
‡ Operated as a continuous-record station.
+ See analyses of samples collected at miscellaneous sites.
a Approximately.
c Published in Miscellaneous Measurement Table.
g Not previously published.
p Peak flow.

Discharge measurements made at miscellaneous sites during water year 1986--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		South-central Alaska--Continued				
+15274505 Little Campbell Creek at Lipscomb Street	Campbell Creek	Lat 61°07'43", long 149°47'42", in NW¼ SW¼ sec.15, T.12 N., R.3 W., Municipality of Anchorage, at Lipscomb Street and 7.1 mi southeast of Anchorage.	--	c1980	6-10-86 6-26-86 7-14-86 7-28-86 8-11-86 8-25-86 9- 9-86 9-24-86	1.2 .95 1.1 .70 1.1 1.3 1.8 2.9
+Craig Creek at Hillside Drive	Little Campbell Creek	Lat 61°07'15", long 149°44'37", in NE¼ NE¼ sec.23, T.12 N., R.3 W., Municipality of Anchorage, at Hillside Drive and 8.4 mi southeast of Anchorage.	--	--	6-10-86 6-25-86 7-14-86 7-28-86	0.18 .18 .21 .18
+15274510 Craig Creek at Birch Road	Little Campbell Creek	Lat 61°07'40", long 149°46'21", in NE¼ SE¼ sec.15, T.12 N., R.3 W., Municipality of Anchorage, at Birch Road and 7.4 mi southeast of Anchorage.	--	--	7-27-81 6- 5-86 6-10-86 6-25-86 7-14-86 7-28-86 8-11-86 8-25-86 9- 9-86 9-24-86	g0.04 .12 .07 .01 .08 .02 .06 .09 .14 .24
+15274520 Little Campbell Creek at Abbott Road	Campbell Creek	Lat 61°08'17", long 149°49'07", on line between secs.9 and 16, T.12 N., R.3 W., Municipality of Anchorage, at Abbott Road and 6.2 mi southeast of Anchorage.	--	c1980-81	(Listed below)	
					6- 5-86	1.6
					6-10-86	1.5
					6-25-86	.74
					7-14-86	.95
					7-28-86	.70
					8-11-86	1.3
					8-13-86	6.4
					8-25-86	1.9
					9- 9-86	2.1
					9-22-86	2.3
					9-23-86	6.4
+15274530 Little Campbell Creek at Dimond Hook Drive	Campbell Creek	Lat 61°08'44", long 149°50'25", in SW¼ NE¼ sec.8, T.12 N., R.3 W., Municipality of Anchorage, at Dimond Hook Drive and 5.3 mi south of Anchorage.	--	--	6-11-86 6-25-86 7-15-86 7-29-86 8-12-86 8-26-86 9- 9-86 9-25-86	1.0 .70 .90 .78 1.1 1.4 2.0 3.0
+15274535 Little Campbell Creek below 76th Avenue	Campbell Creek	Lat 61°09'11", long 149°51'49", in SE¼ SE¼ sec.6, T.12 N., R.3 W., Municipality of Anchorage, below 76th Avenue and 4.7 mi south of Anchorage.	--	c1980	(Listed below)	
					4-23-86	2.0
					4-24-86	2.3
					6- 4-86	1.7
					6-11-86	1.3
					6-17-86	1.2
					6-26-86	.86
					7-15-86	1.0
					7-29-86	.84
					8-12-86	1.4
					8-13-86	6.3
					8-26-86	1.8
					9- 8-86	2.7
					9-22-86	5.9
					9-25-86	3.6
+15274540 North Fork Little Campbell Creek below Lake Otis Parkway	Little Campbell Creek	Lat 61°09'40", long 149°50'02", in SE¼ NE¼ sec.5, T.12 N., R.3 W., Municipality of Anchorage, 300 ft below Lake Otis Parkway and 4.4 mi southeast of Anchorage.	--	--	6- 5-86 6-11-86 6-26-86 7-15-86 7-29-86 8-12-86 8-26-86 9-10-86 9-25-86	0.39 .28 .15 .32 .31 .94 .98 .91 1.7
+15274543 North Fork Little Campbell Creek tributary below Lake Otis Parkway	North Fork Little Campbell Creek	Lat 61°09'42", long 149°50'00", in SE¼ NE¼ sec.5, T.12 N., R.3 W., Municipality of Anchorage, 200 ft below Lake Otis Parkway and 4.4 mi southeast of Anchorage.	--	--	6- 5-86 6-11-86 6-26-86 7-15-86 7-29-86 8-12-86 8-26-86 9-10-86 9-25-86	0.24 .21 .37 .15 .32 .40 .40 .47 .96

+ See analyses of samples collected at miscellaneous sites.
c Published in Miscellaneous Measurements Table.
g Not previously published.

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
		South-central Alaska--Continued				
+15274548 North Fork Little Campbell Creek below Old Seward Highway	Little Campbell Creek	Lat 61°09'14", long 149°51'46", in SE¼ SE¼ sec.6, T.12 N., R.3 W., Municipality of Anchorage, below Old Seward Highway and 4.6 mi south of Anchorage.	--	c1980	(Listed below)	

4-23-86	1.9	6-11-86	.48	7-15-86	.48	8-13-86	6.9	9-22-86	7.7
4-24-86	3.5	6-17-86	.62	7-29-86	.64	8-26-86	1.7	9-25-86	3.2
6- 4-86	.79	6-26-86	.45	8-12-86	2.4	9- 8-86	4.3		

Stream	Tributary to	Location	Drainage area (mi^2)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft^3/s)
+Campbell Creek at Lake Otis Parkway	Cook Inlet	Lat 61°10'42", long 149°50'10", on line between secs. 32 and 33, T.13 N., R.3 W., Municipality of Anchorage, at bridge on Lake Otis Parkway and 3.5 mi southeast of Anchorage.	46.4	c1958-61, s1967-68, c1972	4-22-86 4-24-86 6-16-86 9- 8-86	18 14 127 87
+North Fork Chester Creek below 15th Avenue	Chester Creek	Lat 61°12'20", long 149°50'36", in SE¼ NW¼ sec.20, T.13 N., R.3 W., Municipality of Anchorage, 600 ft south of 15th Avenue and 1.7 mi east of Anchorage.	--	c1980	12- 2-85 8-27-86	1.1 2.2
Middle Fork Thunder Bird Creek near Eklutna	Thunder Bird Creek	Lat 61°22'12", long 149°10'34", in SW¼ SW¼ SW¼ sec.19, T.15 N., R.2 E., Municipality of Anchorage, 20 ft above confluence with South Fork Thunder Bird Creek and 9.1 mi southeast of Eklutna.	--	--	6-28-86 8-13-86 9-10-86	14 10 11
South Fork Thunder Bird Creek near Eklutna	Thunder Bird Creek	Lat 61°22'14", long 149°10'38", in SW¼ SW¼ SW¼ sec.19, T.15 N., R.2 E., Municipality of Anchorage, 10 ft above confluence with Middle Fork Thunder Bird Creek and 9.1 mi southeast of Eklutna.	--	--	6-28-86 8-13-86 9-10-86	7.0 4.4 6.0
North Fork Thunder Bird Creek near Eklutna	Thunder Bird Creek	Lat 61°22'21", long 149°10'35", in NW¼ SW¼ SW¼ sec.19, T.15 N., R.2 E., Municipality of Anchorage, 20 ft above confluence with Thunder Bird Creek and 9.0 mi southeast of Eklutna.	--	--	6-28-86 8-13-86 9-10-86	22 13 12
15283500 Eska Creek near Sutton	Matanuska River	Lat 61°43'44", long 148°54'31", in NE¼ sec.21, T.19 N., R.3 E., Matanuska-Susitna Borough, 100 ft downstream from culverts on Eska-Jonesville Road and 1.5 mi northeast of Sutton.	13.4	c†1965-67, c†1971-85	8-28-86 9-23-86	32 56
15285000 Wasilla Creek near Palmer	Cook Inlet	Lat 61°38'47", long 149°11'45", in SW¼ sec.13, T.18 N., R.1 E., Matanuska-Susitna Borough, 60 ft upstream from culvert entrance on Wasilla-Fishook Road, and 4.1 mi northeast of Palmer.	16.8	c1971, cƚ†1976-83, c†1984-85	5- 2-86 9-23-86	36 70
15285200 Wasilla Creek near Wasilla	Cook Inlet	Lat 61°34'09", long 149°18'50", in NE¼ NW¼ sec.17, T.17 N., R.1 E., Matanuska-Susitna Borough, 100 ft downstream from Parks Highway bridge and 4.2 mi east of Wasilla.	39.5	c1947-49, c1955, ƚ1978, c†1980, ƚ†1981-83, c†1984-85	5- 4-86	24
15290100 Little Susitna River near Houston	Cook Inlet	Lat 61°37'36", long 149°48'03", in NE¼ NW¼ sec.27, T.18 N., R.3 W., Matanuska-Susitna Borough, 300 ft downstream from Parks Highway bridge and 1.6 mi east of Houston.	168	ƚ1978, †1980, ƚ†1981, ƚ1983, c†1984-85	7-23-86	968
15290200 Nancy Lake tributary near Willow	Nancy Lake	Lat 61°41'17", long 149°57'58", in SE¼ SE¼ sec.34, T.19 N., R.4 W., Matanuska-Susitna Borough, 10 ft upstream from culvert at Parks Highway, 0.3 mi upstream from mouth and 4.5 mi southeast of Willow.	8.00	ƚ1978-79, †1980, ƚ1981, ƚ†1983, c†1984-85	7-21-86 9-23-86	18 35

† Operated as a crest-stage partial-record station.
ƚ Low-flow partial-record station.
+ See analyses of samples collected at miscellaneous sites.
c Published in Miscellaneous Measurement Table.
s See summary of Seepage Investigations.

South-central Alaska--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
15291100 Raft Creek near Denali	Susitna River	Lat 63°03'04", long 147°16'22", in SE¼ sec.36, T.21 S., R.2 E., Matanuska-Susitna Borough, upstream from culverts at mi 69.2 Denali Highway and 10.7 mi southeast of Denali.	4.33	c†1963-67, c†1971-75, c†1977, c1978, c†1979-82, c†1984-85	6- 5-86	36
15292900 Goose Creek near Montana	Susitna River	Lat 62°03'42", long 150°03'20", in NW¼ NW¼ sec.29, T.23 N., R.4 W., Matanuska-Susitna Borough, 15 ft downstream from culverts on Parks Highway crossing, 1.5 mi south of Montana, and 23 mi north of Wasilla.	See Note	c†1963-64, †1965, c†1966-71, c†1984-85	9-24-86	274
15292990 Sheep Creek near Willow	Susitna River	Lat 61°59'45", long 150°02'43", in NE¼ SW¼ sec.17, T.22 N., R.4 W., Matanuska-Susitna Borough, 175 ft downstream from Parks Highway bridge, 6.5 mi south of Montana, and 18 mi north of Willow.	See Note	1972, c†1984-85	7-24-86	615
15293000 Caswell Creek near Caswell	Susitna River	Lat 61°56'55", long 150°03'14", in SW¼ sec.32, T.22 N., R.4 W., Matanuska-Susitna Borough, below culvert on Parks Highway and 2.3 mi south of Caswell.	19.6	c†1963-81, c†1983-85	7-23-86 9-24-86	25 48
15293700 Little Willow Creek near Kashwitna	Susitna River	Lat 61°48'37", long 150°05'42", in SW¼ NE¼ sec.24, T.20 N., R.5 W., Matanuska-Susitna Borough, 100 ft downstream from bridge at Parks Highway, 0.4 mi downstream from Rogers Creek, and 3.7 mi south of Kashwitna.	155	ƒ1978, c†1980, ƒ†1981, c†1982, ƒ†1983, c†1984-85	7-23-86	484
15294025 Moose Creek near Talkeetna	Kroto Creek	Lat 62°19'00", long 150°26'30", in NE¼ sec.30, T.26 N., R.7 W., Matanuska-Susitna Borough, at bridge on Petersville Road and 10.5 mi west of Talkeetna.	52.3	c†1972-80, cƒ†1981-84, c†1985	7-24-86	185
15297475 Red Cloud Creek tributary near Kodiak	Red Cloud Creek	Lat 57°49'00", long 152°37'20", in SW¼ sec.24, T.27 S., R.21 W., Kodiak Island Borough, 0.1 mi upstream from mouth and 8.4 mi northwest of Kodiak.	1.51	c†1963-85	3-18-86 6-10-86	10 26

Southwest Alaska

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements Date	Measurements Discharge (ft³/s)
15303011 Wood River tributary near Aleknagik	Wood River	Lat 59°12'26", long 158°40'02", in NE¼ SW¼ sec.23, T.11 S., R.56 W., on left bank 100 ft downstream from road culvert, 4.5 mi upstream from Wood River and 5.5 mi southwest of Aleknagik.	3.35	--	10- 3-85 5-27-86 9-30-86	25 35 25
15303650 Tatalina River near Takotna	Takotna River	Lat 62°53'06", long 155°56'22", in NW¼ NE¼ sec.12, T.32 N., R.36 W., at bridge crossing, 1.2 mi southeast of Tatalina airstrip, 3.0 mi southeast of Takotna Air Force Station and 8.1 mi southeast of Takotna.	--	--	8- 5-86 9-18-86	89 291
15304296 Browns Creek tributary near Bethel	Browns Creek	Lat 60°47'33", long 161°49'40", in SE¼ sec.12, T.8 N., R.72 W., upstream from Bethel State Highway crossing, and 2.1 mi southwest of Bethel.	0.28	c†1985	5- 8-86	.01
15304298 Browns Creek at Bethel	Kuskokwim River	Lat 60°47'56", long 161°46'25", in SW¼ NE¼ sec.8, T.8 N., R.71 W., 10 ft upstream from Ridgecrest Drive at Bethel.	10.5	‡†1985	(Listed below)	

Date	Time	Discharge (ft³/s)	Date	Time	Discharge (ft³/s)	Date	Time	Discharge (ft³/s)	Date	Time	Discharge (ft³/s)	Date	Time	Discharge (ft³/s)
4-15-86	1330	7.0	4-16-86	1600	22	4-17-86	1400	14	6-17-86	1400	2.0	8-22-86	1230	7.2
4-15-86	2130	12	4-16-86	2000	30	5- 8-86	1200	9.6	7-18-86	1500	1.5	9-17-86	1300	14
4-16-86	1000	15	4-17-86	1000	9.0	5- 8-86	1630	10						

† Operated as a crest-stage partial-record station.
‡ Operated as a continuous record station.
ƒ Low-flow partial-record station.
c Published in Miscellaneous Measurement Table.
Note: The discharges during and after the August 1971 flood may be affected by cross-drainage flow from Sheep Creek into Goose Creek. Combined drainage area is 157 mi².

Discharge measurements made at miscellaneous sites during water year 1986--Continued

Stream	Tributary to	Location	Drainage area (mi²)	Measured previously (water years)	Measurements	
					Date	Discharge (ft³/s)
		Yukon Alaska				
15478010 Rock Creek near Paxson	Tangle Lakes	Lat 63°04'16", long 146°06'17", in NW¼ sec.30, T.21 S., R.9 E., 25 ft upstream from bridge at mi 24.8 of the Denali Highway and 18 mi west of Paxson.	50.3	c†1963-85	7-25-86	98
15516200 Slime Creek near Cantwell	Nenana River	Lat 63°30'34", long 148°48'39", in SE¼ sec.24, T.16 S., R.7 W., upstream from culvert on Parks Highway and 9.1 mi northeast of Cantwell.	6.90	c†1966-85	7-25-86	48
		Northwest Alaska				
15585000 Goldengate Creek near Nome	Norton Sound	Lat 64°26'03", long 165°02'46", in SW¼ sec.15, T.12 S., R.32 W., 500 ft upstream from culvert on Nome-Council Road and 11 mi southeast of Nome.	1.55	c†1965-66, c†1976-85	6- 2-86 7- 8-86	35 no flow
15619000 Dexter Creek near Nome	Nome River	Lat 64°35'11", long 165°16'39", in NE¼ sec.33, T.10 S., R.33 W., 800 ft upstream from culvert on Nome-Taylor Road, 0.2 mi upstream from mouth, and 7 mi northeast of Nome.	2.99	†1965, c†1977-83, †1984, c†1985	6- 2-86	60
15624998 Arctic Creek above tributary near Nome	Cripple River	Lat 64°38'16", long 165°42'42", in NE¼ sec.8, T.10 S., R.35 W., 300 ft upstream from Nome-Teller Road crossing, about 125 ft upstream from tributary entering left bank, 2 mi upstream from mouth, and 13 mi northwest of Nome.	1.13	c†1975, c†1979-84	10- 3-85 6- 2-86	4.3 4.6
15625000 Arctic Creek near Nome	Cripple River	Lat 64°38'15", long 165°42'46", in NE¼ sec.8, T.10 S., R.35 W., 20 ft upstream from culvert on Nome-Teller Road, 2 mi upstream above Bluff Creek, and 13 mi northwest of Nome.	1.76	†1969, †1971-75, †1977-78, c1983-84	6- 2-86	39
15633000 Washington Creek near Nome	Sinuk River	Lat 64°42'52", long 165°49'13", in NW¼ sec.14, T.9 S., R.35 W., 400 ft upstream from culvert on Nome-Teller Road and 19 mi northwest of Nome.	6.34	c†1964-66, c†1968-78, c†1980-85	6- 2-86 7- 7-86 8-18-86	33 no flow no flow
15635000 Eldorado Creek near Teller	Tisuk River	Lat 64°57'38", long 166°11'59", in NE¼ NE¼ sec.20, T.6 S., R.37 W., 30 ft downstream of bridge at mile 46.5 of Nome-Teller Road, 0.5 mi upstream from mouth, and 21 mi south of Teller.	5.83	--	6- 3-86 8-18-86	64 26
15668100 Star Creek near Nome	Pilgrim River	Lat 64°55'40", long 164°57'39", in NW¼ sec.33, T.6 S., R.31 W., upstream from culvert at mi 40.5 Nome-Taylor road, 0.9 mi upstream from mouth, and 32 mi northeast of Nome.	3.78	c†1964-85	6- 3-86	33
15668200 Crater Creek near Nome	Pilgrim River	Lat 64°55'48", long 164°52'12", in NW¼ NW¼ sec.36, T.6 S., R.31 W., 50 ft upstream of bridge at mi 43 on Nome-Teller Road, 1.0 mi upstream from mouth, and 34 mi northeast of Nome.	21.9	†1964-65, †1967-74 ‡1975-85	10- 1-85 6- 3-86 8-19-86	90 239 135

† Operated as a crest-stage partial-record station.
‡ Operated as a continuous record station.
c Published in Miscellaneous Measurements Table.

SOUTH-CENTRAL ALASKA

Measurements of lake levels of selected lakes are given in the following table. Data are being collected at these lakes to define lake level changes from seasonal variations, the effects of man, response to droughts and response to changes in the ground-water system. Lake levels are referenced to an arbitrary gage datum and may not be at National Geodetic Vertical Datum.

Lake	Tributary to	Location	Surface area (acres)	Measured previously (water year)	Measurements Date	Measurements Lake Level (ft)
		Kenai Peninsula Borough				
Shadura	Closed lake in Beaver Creek basin	Lat 60°42'17", long 151°00'12", in NE¼ sec.15, T.7 N., R.10 W., at north shore, 13 mi northeast of Kenai.	258	1970-71, 1976-85	5-20-86	16.55
Konovalof	Closed lake in Beaver Creek basin	Lat 60°39'49", long 151°09'52", in SW¼ sec.26, T.7 N., R.11 W., at south shore of island near north shore of lake, 8.5 mi northeast of Kenai.	250	1970-71, 1976-85	5-20-86	17.07
Kidney	Closed lake	Lat 60°39'48", long 151°15'35", in SW¼ sec.29, T.7 N., R.11 W., at east shore, 0.2 mi north of Lamplighter Holt Road, and 7.5 mi north of Kenai.	71	D1970-72, D1974-76, 1977-85	5-14-86	104.39
Cabin	Closed lake	Lat 60°40'30", long 151°19'15", in NE¼ sec.26, T.7 N., R.12 W., at east shore, 0.2 mi west of Miller Loop Road, and 8.5 mi north of Kenai.	53	D1970-72, D1974-76, 1977-85	5-14-86	95.75
Island	Closed lake	Lat 60°42'19", long 151°19'05", in SE¼ sec.11, T.7 N., R.12 W., at west shore, 0.1 mi east of Island Lake Road, and 10.7 mi north of Kenai.	272	D1970-72, D1974-76, 1977-85	5-14-86	98.74
Dog Bone	Closed lake	Lat 60°41'42", long 151°17'35", in SE¼ sec.13, T.7 N., R.12 W., at the western shore, 0.9 mi east of Island Lake Road, and 9.7 mi north of Kenai.	27	D1970-72 D1974-76 1977, 1984-85	5-15-86	101.84
Unnamed Lake	Closed lake	Lat 60°40'56", long 151°20'54", in SW¼ sec.23, T.7 N., R.12 W., at south shore, 0.4 mi north of Miller Loop Road, and 9.4 mi north of Kenai.	8.6	D1970-72, D1974-76, 1977-85	5-14-86	95.69
Bernice	Bernice Creek	Lat 60°41'33", long 151°21'48", in SW¼SE¼ sec.15, T.7 N., R.12 W., at campground on south shore and 10 mi northwest of Kenai. (Station number 15266895.)	150	D1970-72, D1974-76, ‡1977-79, 1980-85	5-14-86	75.58
Douglas	Closed lake	Lat 60°40'27", long 151°13'20", in NW¼ sec.28, T.7 N., R.11 W., at north shore, 0.8 mi east of Lamplighter Holt Road, and 8.3 mi north of Kenai.	90	D1970-72, D1974-76, 1977-85	5-14-86	108.62
Wik (formerly Wick)	Closed lake	Lat 60°43'06", long 151°14'35", in NE¼ sec.8, T.7 N., R.11 W., at north shore, 0.2 mi south of Lamplighter Holt Road, and 11.4 mi north of Kenai.	173	D1970-72, D1974-76, 1977-85	5-14-86	106.83
Georgine (formerly Laura)	Closed lake	Lat 60°43'44", long 151°13'15", in NW¼ sec.4, T.7 N., R.11 W., at northwest shore, 0.3 mi southeast of Halbouty Road, and 12.1 mi north of Kenai.	41	D1970-72, D1974-76, 1977-85	5-14-86 c10-20-82 c10- 4-83 c 5-15-84	107.35 108.61 107.79 107.36
Daniels	Bishop Creek	Lat 60°44'25", long 151°10'27", in SW¼ sec.34, T.8 N., R.11 W., at northwest shore, 1.2 mi east of North Kenai Road, and 13 mi north of Kenai.	602	D1970-72, D1976, 1977-85	5-15-86	86.44
		Municipality of Anchorage				
Sand	Closed lake	Lat 61°09'03", long 149°58'25", in NW¼ sec.10, T.12 N., R.4 W., at west shore, and 4.0 mi southwest of Spenard. (Station number 15274700.)	78	*1967-74, 1975-85	10-24-85 5-27-86 7-15-86 7-24-86 8-25-86 9-24-86	87.05 87.34 86.75 86.72 86.74 86.82
Little Campbell	Closed lake	Lat 61°09'49", long 150°01'20", in NE¼ sec.5, T.12 N., R.4 W., in Kincaid Park near Anchorage International Airport, at the northeast shore, and 11.9 mi southwest of Spenard.	11	d1975, d1977-81, d1983, 1984-85	5-27-86	54.58

* Operated as a daily stage station during open water with occasional readings during rest of year.
‡ Operated as a continuous-record stage station.
c Correction made to previously published lake levels.
d At different site and/or datum.
D Published at different datum. Converted to National Geodetic Vertical Datum, which is current datum.

SOUTH-CENTRAL ALASKA

Lake	Tributary to	Location	Surface area (acres)	Measured previously (water year)	Measurements	
					Date	Lake Level (ft)
		Municipality of Anchorage--Continued				
Conners	Closed lake	Lat 61°10'03", long 149°55'44", in SE¼ sec.35, T.13 N., R.4 W., near Anchorage International Airport, at southeast shore, and 2.8 mi southwest of Spenard.	33	1973-75, 1979-81, 1983-85	5-27-86	75.07
Jewel	Closed lake	Lat 61°08'23", long 149°57'41", in SE¼ sec.10, T.12 N., R.4 W., at public swimming area on northeast shore and 4.2 mi southwest of Spenard.	27	1974-75, 1977-81, 1983-85	5-27-86	91.40
Sundi	Closed lake	Lat 61°08'50", long 149°57'55", in NE¼ sec.10, T.12 N., R.4 W., at northeast shore and 3.9 mi southwest of Spenard.	8.8	1974-75, 1977-81, 1983-85	5-27-86	90.32
Delong	Closed lake	Lat 61°09'47", long 149°57'20", in NE¼ sec.3, T.12 N., R.4 W., near Anchorage International Airport, at southeast shore, and 2.8 mi southwest of Spenard.	18	1973, 1977-81, 1983-85	5-27-86	75.22
Goose	Closed lake	Lat 61°11'48", long 149°49'06", in SE¼ sec.21, T.12 N., R.3 W., at north shore and 2.9 mi southeast of Anchorage Post Office.	18	d1958-64, d1969-72, d1975, 1977-81, 1983-85	5-27-86	19.68
Lake Otis	Closed lake	Lat 61°11'27", long 149°50'18", in NE¼ sec.29, T.13 N., R.2 W., at southeast shore and 2.6 mi southeast of Anchorage Post Office.	9.0	‡1958-59, 1969-73, 1975, 1977-81, 1983-85	5-27-86	17.27
		Matanuska-Susitna Borough				
Canoe	Closed lake	Lat 61°33'22", long 149°11'42", in NW¼NE¼ sec.24, T.17 N., R.1 E., at southwest shore, west of Glenn Highway, and 4.5 mi southwest of Palmer.	--	1984-85	5-19-86 10-11-12-86 10-22-86	2.52 h2.31 2.22
Kepler	Closed lake	Lat 61°33'11", long 149°11"56", in NW¼NW¼ sec.24, T.17 N., R.1 E., at east shore, north of Glenn Highway, and 5.0 mi southwest of Palmer.	--	1984-85	5-19-86 10-22-86	11.38 11.15
Finger	Closed lake	Lat 61°36'47", long 149°15'32", in NW¼ sec.34, T.18 N., R.1 E., at northeast shore, north of Wasilla Road and 4.5 mi west of Palmer.	--	1978, 1981-85	5-19-86 10-22-86	12.90 13.02
Kings	Closed lake	Lat 61°37'13", long 149°21'35", in SW¼ sec.25, T.18 N., R.1 W., at northwest shore at King's Lake Camp and 4 mi northeast of Wasilla.	--	1978, 1981-85	5-19-86 10-11-12-86 10-22-86	18.73 h20.08 19.93
Memory	Closed lake	Lat 61°37'52", long 149°25'37", in SE¼ sec.22, T.18 N., R.1 W., at northwest shore at the Menard residence (Laze C&L Ranch) and 3.5 mi northeast of Wasilla.	--	1978, 1981-85	5-19-86 10-11-12-86 10-22-86	5.84 h6.67 6.46
Rocky	Closed lake	Lat 61°33'27", long 149°49'49", in SW¼ sec.16, T.17 N., R.3 W., at southwest shore in Rocky Lake Wayside, north of Big Lake, and 5.5 mi south of Houston.	--	1978, 1981-85	5-19-86 10-21-86	9.70 9.71
Big	Fish Creek	Lat 61°32'04", long 149°49'30", in SE¼ sec.28, T.17 N., R.3 W., head of Fish Creek at lake outlet, on left bank upstream from square notched weir upstream from bridge on Big Lake Road, and 13 mi southwest of Wasilla. (Station number 15287000.)	3,104	1972-85	5-29-86 10-21-86	10.32 10.83

‡ Operated as a continuous-record stage station.
d At different site and/or datum.
h Highwater mark from high water of October 11-12, 1986.

LAKE-LEVEL MEASUREMENTS OF SELECTED LAKES--Continued

SOUTH-CENTRAL ALASKA

Lake	Tributary to	Location	Surface area (acres)	Measured previously (water year)	Measurements	
					Date	Lake Level (ft)
		Matanuska-Susitna Borough--Continued				
Marion	Closed lake	Lat 61°30'42", long 149°55'05", in NW¼ sec.1, T.16 N., R.4 W., at northwest shore, west of Big Lake Road and south of Big Lake, and 7.5 mi northwest of Knik.	--	1978, 1981-85	5-29-86	6.78
					10-21-86	7.22
Lost	Closed lake	Lat 61°20'36", long 149°58'55", in SW¼ sec.34, T.15 N., R.4 W., on north end of lake, 2.5 mi west of Knik Arm of Cook Inlet, and 6 mi north of Point MacKenzie.	--	1981-85	5-20-86	18.00
					10- 8-86	17.99
Twin Island	Closed lake	Lat 61°19'25", long 150°00'35", in NW¼ sec.9, T.14 N., R.4 W., on northeast shore, 3 mi west of Knik Arm of Cook Inlet, and 5.2 mi north of Point MacKenzie.	--	1981-85	5-20-86	15.55
					10- 8-86	15.63
Lorraine	Closed lake	Lat 61°17'43", long 149°56'48", in NW¼ sec.23, T.14 N., R.4 W., on northeast shore, 1 mi west of Knik Arm of Cook Inlet, and 2.5 mi north of Point MacKenzie.	--	1981-85	5-20-86	4.06
					10- 8-86	3.94
Horseshoe	Little Susitna River	Lat 61°21'50", long 150°09'20", in NW¼ sec.27, T.15 N., R.5 W., at the northwest shore at Oren Hudson's cabin and 15 mi northwest of Anchorage.	--	1978, 1981-85	5-20-86	4.65
					10- 8-86	5.04
Lynne	Closed lake	Lat 61°42'41", long 150°01'52", in NE¼ sec.29, T.19 N., R.4 W., at northeast shore, northeast of Nancy Lake, and 2.5 mi southeast of Willow.	--	1978, 1981-85	5-29-86	11.14
					10-21-86	12.10
Nancy	Lake Creek	Lat 61°42'09", long 150°00'20", in SE¼ sec.28, T.18 N., R.4 W., at northeast shore and 3 mi south of Willow.	--	1978, 1981-85	5-29-86	6.50
					10-11-12-86	h10.02
					10-21-86	8.89
Twelvemile	Closed lake	Lat 61°46'19", long 149°42'42", in NW¼ sec.6, T.19 N., R.2 W., at northeast shore, south of Willow Creek Road and 11 mi east of Willow.	--	1978, 1981-85	5-29-86	19.27
					10-21-86	19.79
Willow	Closed lake	Lat 61°44'39", long 150°03'08", in NW¼ sec.17, T.19 N., R.4 W., at southeast shore and 0.5 mi west of Willow.	--	1978, 1981-85	5-29-86	12.22
					10-21-86	12.93

h Highwater mark from high water of October 11-12, 1986.

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SOUTHEAST ALASKA

15045900 RHINE C NR JUNEAU AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)
OCT						
25...	1020	20	1.0	--	5	0.60
NOV						
22...	1140	7.8	0.0	1.0	5	0.50
DEC						
12...	1050	4.2	-1.0	0.5	5	0.40
JAN						
27...	1045	26	2.0	2.0	10	0.40
MAR						
12...	1145	15	8.0	2.0	5	0.40
MAY						
02...	1020	39	14.0	--	2	1.0
19...	1115	30	10.5	4.5	5	1.0
JUL						
16...	1200	45	12.0	6.5	5	0.50
AUG						
21...	1400	28	13.0	9.0	3	0.40
SEP						
16...	1005	13	9.0	6.0	10	0.40

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN											
27...	1045	26	48	7.20	2.0	2.0	10	0.40	K2	20	9
MAY											
19...	1115	30	44	7.00	10.5	4.5	5	1.0	K1	18	7
JUL											
16...	1200	45	33	6.80	12.0	6.5	5	0.50	E1	14	6

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)
JAN											
27...	6.8	0.60	1.5	12	11	14	5.1	2.3	0.04	2.4	22
MAY											
19...	6.2	0.50	1.2	11	11	13	5.8	1.6	0.04	2.2	29
JUL											
16...	4.8	0.50	0.90	9	8.0	10	5.6	0.68	0.02	1.9	21

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)
JAN										
27...	0.440	<0.010	<1	68	<0.5	<1	<10	<3	<10	8
MAY										
19...	0.320	0.010	<1	73	<0.5	<1	<10	<3	<10	6
JUL										
16...	0.040	<0.010	<1	44	<0.5	<1	<10	<3	<10	4

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
JAN										
27...	<10	<4	<1	<0.1	<10	<1	<1	23	<6	18
MAY										
19...	<10	<4	1	<0.1	<10	<1	1	22	<6	22
JUL										
16...	<10	<4	2	<0.1	<10	<1	<1	19	<6	19

K NON-IDEAL COLONY COUNT
E ESTIMATED

SOUTHEAST ALASKA--Continued

15046000 GRINDSTONE C NR JUNEAU AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)
NOV						
01...	1020	23	4.0	4.0	5	0.50
22...	1145	14	0.0	1.0	5	0.60
DEC						
12...	1105	7.9	1.0	0.0	5	0.30
JAN						
27...	1035	29	2.0	2.0	10	0.60
MAR						
12...	1210	17	8.0	2.0	5	0.60
MAY						
02...	1010	29	13.0	--	2	1.2
19...	1055	29	10.5	5.0	5	1.0
JUL						
16...	1110	32	11.0	6.5	5	0.70
AUG						
21...	1315	44	13.5	8.5	33	0.30
SEP						
16...	1030	16	12.0	6.0	5	0.40

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN											
27...	1035	29	--	7.60	2.0	2.0	10	0.60	K7	35	7
MAY											
19...	1055	29	85	7.40	10.5	5.0	5	1.0	K1	38	8
JUL											
16...	1110	32	68	7.20	11.0	6.5	5	0.70	K3	30	4

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
JAN											
27...	13	0.70	1.6	28	28	34	4.5	2.4	0.05	2.6	44
MAY											
19...	14	0.70	1.2	30	30	36	5.9	1.7	0.05	2.5	49
JUL											
16...	11	0.70	1.0	26	26	32	5.7	0.94	0.05	2.2	42

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
JAN										
27...	0.490	< 0.010	1	29	< 0.5	< 1	< 10	< 3	< 10	8
MAY										
19...	0.400	0.010	1	43	< 0.5	< 1	< 10	< 3	< 10	9
JUL										
16...	0.120	0.010	1	30	< 0.5	< 1	< 10	< 3	< 10	4

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JAN										
27...	< 10	< 4	< 1	< 0.1	< 10	< 1	< 1	35	< 6	7
MAY										
19...	< 10	< 4	1	< 0.1	< 10	< 1	< 1	35	< 6	17
JUL										
16...	< 10	< 4	2	< 0.1	< 10	< 1	< 1	31	< 6	4

K NON-IDEAL COLONY COUNT

SOUTHEAST ALASKA--Continued

15047940 L SHEEP C NR JUNEAU AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)
JUN						
26...	1130	7.6	11.5	8.0	5	1.3
JUL						
23...	1500	15	13.0	10.5	10	1.2
AUG						
18...	1206	8.2	12.5	8.0	10	0.30
SEP						
17...	1247	1.3	11.0	7.5	3	0.40

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JUL											
23...	1500	15	57	7.40	13.0	10.5	10	1.2	K180	18	0

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
JUL											
23...	6.7	0.30	0.70	17	18	21	1.3	0.36	0.02	1.8	25

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
JUL										
23...	0.150	< 0.010	< 1	8	< 0.5	< 1	< 10	< 3	< 10	27

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JUL										
23...	< 10	< 4	2	< 0.1	< 10	< 1	< 1	22	< 6	5

K NON-IDEAL COLONY COUNT

SOUTHEAST ALASKA--Continued

15048000 SHEEP C NR JUNEAU AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)
OCT 16...	1205	62	6.0	4.5	5	0.50
NOV 25...	1020	11	-9.0	3.0	3	0.40
DEC 13...	1302	8.7	0.0	3.5	5	0.30
JAN 09...	1315	24	2.0	3.5	2	0.70
FEB 11...	1354	18	3.5	3.0	5	0.50
MAR 13...	1406	24	11.0	4.0	5	0.50
APR 23...	1100	18	1.0	3.0	1	1.0
MAY 13...	1340	28	10.0	5.5	5	1.0
JUN 25...	1045	117	11.0	4.0	5	0.80
JUL 23...	1115	107	10.5	5.5	5	1.2
AUG 18...	1115	71	12.0	5.5	5	0.20
SEP 17...	1114	25	14.0	5.5	3	0.50

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN 09...	1315	24	88	7.40	2.0	3.5	2	0.70	E1	43	8
MAY 13...	1340	28	86	7.20	10.0	5.5	5	1.0	K1	40	0
JUL 23...	1115	107	55	7.30	10.5	5.5	5	1.2	K79	23	5

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)
JAN 09...	15	1.3	0.90	35	35	42	12	1.1	< 0.10	2.7	54
MAY 13...	14	1.2	1.3	--	--	35	7.9	1.5	0.08	2.6	56
JUL 23...	8.2	0.70	0.70	18	18	21	4.8	0.50	0.05	1.7	29

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)
JAN 09...	--	0.350	--	1	58	< 0.5	< 1	< 10	< 3	< 10	< 3
MAY 13...	0.370	--	< 0.010	1	51	< 0.5	< 1	< 10	< 3	< 10	< 3
JUL 23...	0.080	--	0.010	< 1	42	< 0.5	< 1	< 10	< 3	< 10	11

E ESTIMATED
K NON-IDEAL COLONY COUNT

SOUTHEAST ALASKA-Continued

15048000 SHEEP C NR JUNEAU AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JAN										
09...	<10	<4	<1	<0.1	<10	1	<1	48	<6	3
MAY										
13...	<10	<4	<1	<0.1	<10	<1	<1	44	<6	19
JUL										
23...	<10	<4	2	<0.1	<10	<1	<1	27	<6	7

15052549 STEEP C AT FOOTBRIDGE NR AUKE BAY AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)
OCT						
16...	1200	12	4.5	3.0	5	0.60
NOV						
20...	1100	2.5	-20.0	1.0	5	0.30
DEC						
16...	1320	4.9	2.0	0.0	7	1.0
JAN						
06...	1320	4.2	3.0	1.0	5	0.50
FEB						
10...	1320	2.4	2.0	0.5	10	0.40
MAR						
07...	1430	4.0	-0.5	0.0	5	0.50
APR						
17...	1355	2.7	9.0	2.0	5	1.2
MAY						
13...	1245	4.2	8.0	3.5	10	1.2
JUN						
12...	1415	23	18.0	7.0	5	1.0
JUL						
18...	1130	11	16.5	9.5	5	0.50
AUG						
13...	1430	26	12.5	8.5	10	0.50
SEP						
15...	1510	4.1	19.5	7.5	5	0.60

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN											
06...	1320	4.2	76	7.40	3.0	1.0	5	0.50	E1	30	2
MAY											
13...	1245	4.2	56	7.40	8.0	3.5	10	1.2	K1	27	4
JUL											
18...	1130	11	54	7.60	16.5	9.5	5	0.50	E1	24	0

E ESTIMATED
K NON-IDEAL COLONY COUNT

SOUTHEAST ALASKA--Continued

15052549 STEEP C AT FOOTBRIDGE NR AUKE BAY AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
JAN 06...	11	0.70	0.80	28	28	34	3.5	0.49	0.05	3.5	37
MAY 13...	9.6	0.60	0.80	23	23	28	3.1	0.65	0.06	3.4	33
JUL 18...	8.7	0.50	0.70	24	24	29	3.1	0.38	0.04	3.0	45

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
JAN 06...	0.070	<0.010	<1	35	<0.5	<1	<10	<3	<10	4
MAY 13...	0.050	<0.010	<1	37	<0.5	<1	<10	<3	<10	8
JUL 18...	<0.010	<0.010	<1	34	<0.5	<1	<10	<3	<10	7

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JAN 06...	<10	<4	2	<0.1	<10	<1	<1	36	<6	7
MAY 13...	<10	<4	<1	<0.1	<10	<1	<1	30	<6	37
JUL 18...	<10	<4	2	<0.1	<10	<1	<1	27	<6	6

15052780 MONTANA C AB MC GINNIS C NR AUKE BAY AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)
OCT 16...	1030	17	--	3.5	10	0.60
NOV 19...	1350	5.8	-15.0	1.0	5	0.40
DEC 16...	1155	28	0.0	0.0	10	1.4
JAN 07...	1200	24	2.0	2.0	25	0.80
FEB 10...	1115	6.9	1.0	0.5	10	0.40
MAR 11...	1530	11	3.0	0.5	15	0.50
APR 11...	1200	11	-2.0	1.0	10	1.0
MAY 12...	1150	18	2.5	2.0	20	1.2
JUN 12...	1305	17	18.0	8.0	5	1.0
JUL 18...	0940	7.7	13.5	10.0	5	0.60
AUG 13...	1245	50	11.0	9.5	50	0.80
SEP 15...	1410	5.3	18.5	8.0	5	0.40

SOUTHEAST ALASKA--Continued

15052780 MONTANA C AB MC GINNIS C NR AUKE BAY AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN 07...	1200	24	52	7.00	2.0	2.0	25	0.80	K1	21	3
MAY 12...	1150	18	45	6.90	2.5	2.0	20	1.2	K1	20	5
JUL 18...	0940	7.7	65	7.30	13.5	10.0	5	0.60	K2	30	3

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)
JAN 07...	6.6	1.0	1.1	18	18	22	2.1	0.63	0.05	3.8	31
MAY 12...	6.4	0.90	1.1	16	15	18	2.0	0.56	0.04	3.6	29
JUL 18...	9.8	1.4	1.3	27	27	33	3.3	0.47	0.06	4.2	42

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)
JAN 07...	0.030	0.020	<1	4	<0.5	<1	<10	<3	40	56
MAY 12...	0.040	0.010	1	13	<0.5	<1	<10	<3	<10	47
JUL 18...	<0.010	<0.010	4	22	<0.5	<1	<10	<3	<10	17

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
JAN 07...	<10	<4	1	<0.1	<10	<1	<1	55	<6	8
MAY 12...	10	<4	2	<0.1	<10	<1	<1	53	<6	18
JUL 18...	<10	<4	2	<0.1	<10	<1	<1	76	<6	7

K NON-IDEAL COLONY COUNT

SOUTHEAST ALASKA-Continued

15052790 MC GINNIS C NR AUKE BAY AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)
OCT						
16...	1135	45	--	4.0	5	0.70
NOV						
19...	1345	11	-15.0	1.0	5	0.30
DEC						
16...	1120	25	0.0	0.0	15	1.9
JAN						
07...	1235	30	2.0	1.0	25	1.0
FEB						
10...	1215	11	1.0	1.0	10	0.40
MAR						
11...	1607	15	2.0	2.0	5	0.50
APR						
11...	1210	11	-1.0	1.0	1	1.1
MAY						
12...	1230	27	2.5	3.0	5	1.0
JUN						
12...	1300	58	18.0	6.5	5	1.0
JUL						
18...	1025	104	15.0	6.0	5	0.60
AUG						
13...	1336	213	11.0	6.5	10	2.6
SEP						
15...	1330	28	18.5	6.5	5	0.30

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN											
07...	1235	30	48	6.90	2.0	1.0	25	1.0	K4	20	7
MAY											
12...	1230	27	64	6.90	2.5	3.0	5	1.0	K1	28	12
JUL											
18...	1025	104	34	6.90	15.0	6.0	5	0.60	K1	15	3

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
JAN											
07...	6.7	0.80	0.70	13	13	16	6.4	0.52	0.04	2.8	26
MAY											
12...	9.5	1.0	0.80	17	16	20	8.5	0.56	0.04	3.3	36
JUL											
18...	5.0	0.50	0.60	12	12	15	4.1	0.30	0.03	2.0	21

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
JAN										
07...	0.120	<0.010	<1	17	<0.5	<1	<10	<3	<10	53
MAY										
12...	0.230	0.010	<1	32	<0.5	<1	<10	<3	<10	12
JUL										
18...	0.020	<0.010	<1	29	<0.5	<1	<10	<3	<10	9

K NON-IDEAL COLONY COUNT

SOUTHEAST ALASKA--Continued

15052790 MC GINNIS C NR AUKE BAY AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JAN 07...	< 10	< 4	< 1	< 0.1	< 10	< 1	10	32	< 6	10
MAY 12...	< 10	< 4	1	< 0.1	< 10	< 1	< 1	42	< 6	20
JUL 18...	10	< 4	3	< 0.1	< 10	< 1	< 1	21	< 6	8

15054098 PETERSON C AT GLACIER HWY NR AUKE BAY AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)
OCT 16...	0920	21	7.0	4.5	70	1.0
NOV 19...	1110	8.6	-2.0	0.0	50	0.50
DEC 16...	1115	19	3.5	0.0	50	1.5
JAN 06...	1115	14	4.0	1.0	50	0.70
FEB 10...	1000	8.3	-0.5	0.0	50	0.80
MAR 07...	1207	15	-1.0	0.0	50	0.80
APR 11...	1400	16	2.0	1.0	40	1.2
MAY 12...	1015	33	7.5	3.0	40	1.2
JUN 12...	1045	14	17.0	9.5	20	1.3

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN 06...	1115	14	23	6.40	4.0	1.0	50	0.70	K8	6	1
MAY 12...	1015	33	17	6.20	7.5	3.0	40	1.2	K1	5	3

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
JAN 06...	1.9	0.40	1.6	5	5.0	6.0	0.9	1.7	0.03	2.6	17
MAY 12...	1.5	0.30	1.0	4	2.0	3.0	0.5	0.74	0.02	2.0	14

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
JAN 06...	0.030	0.020	< 1	< 2	< 0.5	< 1	< 10	< 3	< 10	8
MAY 12...	< 0.010	0.010	< 1	10	< 0.5	< 1	< 10	< 3	< 10	160

K NON-IDEAL COLONY COUNT

SOUTHEAST ALASKA--Continued

15054098 PETERSON C AT GLACIER HWY NR AUKE BAY AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JAN 06...	<10	<4	9	<0.1	<10	<1	10	22	<6	7
MAY 12...	<10	<4	6	<0.1	<10	<1	<1	18	<6	10

15108550 TR TO STEPHENS PASSAGE NR DOUGLAS AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)
NOV 01...	1230	4.5	2.0	2.0	30	0.50
21...	1420	2.1	-3.0	0.0	7	0.40
DEC 12...	1300	1.2	-0.5	0.0	10	0.50
JAN 27...	1330	10	2.0	1.0	50	0.50
MAR 12...	1330	6.7	2.5	1.0	40	0.60
MAY 02...	1210	18	12.0	--	20	1.0
20...	1050	33	5.5	3.0	40	1.0
JUL 17...	1120	7.3	--	9.5	5	0.80
AUG 21...	0937	8.2	9.0	7.5	10	0.20
SEP 16...	1236	2.2	9.0	6.5	5	0.20

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN 27...	1330	10	33	7.20	2.0	1.0	50	0.50	K2	16	5
MAY 20...	1050	33	32	7.30	5.5	3.0	40	1.0	K1	16	3
JUL 17...	1120	7.3	46	6.90	--	9.5	5	0.80	K1	20	1

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
JAN 27...	5.1	0.90	1.1	13	11	14	0.9	1.3	0.02	3.2	28
MAY 20...	5.1	0.80	0.90	13	13	15	0.8	0.86	0.03	2.9	23
JUL 17...	6.5	1.0	0.80	19	19	23	0.9	0.40	0.02	2.2	27

K NON-IDEAL COLONY COUNT

SOUTHEAST ALASKA--Continued

15108550 TR TO STEPHENS PASSAGE NR DOUGLAS AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)
JAN 27...	0.370	< 0.010	< 1	3	< 0.5	< 1	< 10	3	< 10	81
MAY 20...	0.030	< 0.010	< 1	15	< 0.5	< 1	< 10	< 3	< 10	56
JUL 17...	< 0.010	< 0.010	< 1	4	< 0.5	< 1	< 10	< 3	10	10

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
JAN 27...	< 10	< 4	2	< 0.1	< 10	< 1	< 1	21	< 6	5
MAY 20...	< 10	< 4	< 1	< 0.1	< 10	< 1	< 1	18	< 6	11
JUL 17...	< 10	< 4	2	< 0.1	< 10	< 1	< 1	27	< 6	7

15108600 HILDA C NR DOUGLAS AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)
NOV 01...	1220	17	3.0	2.5	50	0.60
21...	1345	4.8	-5.0	0.0	15	0.50
DEC 12...	1230	E4.9	-1.0	1.0	10	0.70
JAN 27...	1300	52	1.0	1.0	70	0.70
MAR 12...	1355	28	1.0	2.0	50	0.70
MAY 02...	1315	60	15.0	--	15	1.0
20...	1110	89	7.0	3.5	40	1.1
JUL 17...	1015	13	--	10.5	7	0.50
AUG 21...	1135	13	14.0	8.5	25	0.40
SEP 16...	1235	2.6	16.0	7.5	5	0.50

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN 27...	1300	52	26	6.90	1.0	1.0	70	0.70	K3	12	4
MAY 20...	1110	89	25	6.80	7.0	3.5	40	1.1	K10	12	4
JUL 17...	1015	13	42	7.20	--	10.5	7	0.50	24	19	2

K NON-IDEAL COLONY COUNT

SOUTHEAST ALASKA--Continued

15108600 HILDA C NR DOUGLAS AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
JAN											
27...	3.6	0.70	1.2	9	8.0	10	0.8	1.5	0.03	3.2	20
MAY											
20...	3.7	0.60	0.90	9	8.0	10	0.8	0.69	0.02	2.5	25
JUL											
17...	6.0	0.90	1.2	17	17	21	1.5	0.53	0.03	3.1	28

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
JAN										
27...	0.080	<0.010	<1	3	<0.5	<1	<10	<3	<10	170
MAY										
20...	0.110	<0.010	<1	15	<0.5	<1	<10	<3	<10	91
JUL										
17...	0.050	<0.010	<1	3	<0.5	<1	<10	<3	<10	40

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JAN										
27...	<10	<4	4	<0.1	<10	<1	<1	16	<6	6
MAY										
20...	<10	<4	2	<0.1	<10	<1	<1	13	<6	20
JUL										
17...	<10	<4	4	0.1	<10	<1	<1	24	<6	4

15108709 BULLION C AB MOUTH NR DOUGLAS AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)
OCT						
25...	1000	4.7	1.0	2.5	10	0.50
NOV						
22...	1230	1.1	-11.0	0.0	5	0.50
DEC						
12...	1125	1.4	-2.0	0.0	5	0.50
JAN						
27...	1515	8.5	2.0	1.5	25	0.50
MAR						
12...	0955	5.9	2.0	1.0	10	0.60
MAY						
02...	0915	11	13.0	--	5	1.1
19...	1215	13	10.0	4.5	15	1.1
JUL						
16...	0955	4.6	--	9.5	5	0.60
AUG						
21...	1715	6.6	10.5	9.0	8	0.30
SEP						
16...	1445	1.9	16.5	7.5	5	0.40

SOUTHEAST ALASKA--Continued

15108709 BULLION C AB MOUTH NR DOUGLAS AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN											
27...	1515	8.5	44	7.30	2.0	1.5	25	0.50	K2	20	4
MAY											
19...	1215	13	47	7.20	10.0	4.5	15	1.1	K8	21	2
JUL											
16...	0955	4.6	60	7.20	--	9.5	5	0.60	K2	30	2

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
JAN											
27...	7.4	0.30	1.3	17	16	20	2.5	1.4	0.04	2.5	29
MAY											
19...	7.9	0.40	1.2	19	19	23	2.7	0.83	0.03	2.4	32
JUL											
16...	11	0.50	1.3	28	28	34	3.7	0.54	0.03	3.1	38

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
JAN										
27...	0.100	<0.010	<1	3	<0.5	<1	<10	<3	40	31
MAY										
19...	0.080	<0.010	<1	14	<0.5	<1	<10	<3	<10	18
JUL										
16...	<0.010	<0.010	<1	4	<0.5	<1	<10	<3	<10	10

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JAN										
27...	<10	<4	<1	<0.1	<10	<1	<1	76	<6	6
MAY										
19...	<10	<4	1	<0.1	<10	<1	<1	70	<6	39
JUL										
16...	<10	<4	2	<0.1	<10	<1	<1	100	<6	9

K NON-IDEAL COLONY COUNT

SOUTHEAST ALASKA--Continued

15108788 LAWSON C AB BEAR C DIV DAM NR DOUGLAS AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)
OCT 16...	1030	12	0.5	4.0	10	0.50
NOV 15...	1045	4.9	-1.0	0.0	10	0.50
DEC 17...	1100	26	-0.5	0.0	30	1.4
JAN 08...	0950	14	-1.5	0.0	30	0.60
FEB 12...	1109	4.1	0.5	0.0	10	0.50
MAR 13...	1010	14	4.0	1.0	20	0.70
APR 22...	1315	12	1.0	1.0	20	0.80
MAY 14...	1215	22	6.5	3.0	15	1.0
JUN 25...	1356	21	11.0	6.0	10	0.80
JUL 24...	1430	57	11.0	9.0	40	1.0
AUG 27...	1100	7.5	18.0	9.5	--	--
SEP 17...	1433	2.4	9.0	7.0	5	0.50

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN 08...	0950	14	28	7.00	-1.5	0.0	30	0.60	E1	12	4
MAY 14...	1215	22	26	7.00	6.5	3.0	15	1.0	K2	12	3
JUL 24...	1430	57	19	7.10	11.0	9.0	40	1.0	K100	10	4

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
JAN 08...	4.0	0.50	0.90	9	8.0	10	1.6	1.1	0.03	2.9	22
MAY 14...	4.0	0.50	0.80	9	9.0	11	1.6	0.68	0.03	2.9	24
JUL 24...	3.4	0.40	0.70	7	6.0	7.0	0.9	0.33	0.02	2.7	24

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
JAN 08...	0.100	<0.010	<1	3	<0.5	<1	<10	<3	<10	52
MAY 14...	0.130	<0.010	<1	14	<0.5	<1	<10	<3	<10	47
JUL 24...	0.010	<0.010	<1	14	<0.5	<1	<10	<3	<10	100

E ESTIMATED
K NON-IDEAL COLONY COUNT

15108788 LAWSON C AB BEAR C DIV DAM NR DOUGLAS AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
JAN 08...	<10	<4	3	<0.1	<10	<1	<1	22	<6	5
MAY 14...	<10	<4	1	<0.1	<10	<1	<1	19	<6	14
JUL 24...	10	<4	3	<0.1	<10	<1	2	14	<6	8

15108818 KOWEE C (TREADWELL DITCH FOOTBRIDGE) NR JUNEAU AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)
OCT 16...	1135	11	3.0	4.0	10	0.50
NOV 15...	1345	3.8	-5.0	0.0	15	0.50
DEC 17...	1137	14	--	1.0	40	0.60
JAN 08...	1150	4.8	-1.0	0.0	30	0.40
FEB 12...	1330	2.5	1.0	0.0	10	0.50
MAR 13...	1200	7.3	5.0	1.0	15	0.70
APR 22...	1120	5.6	3.0	1.0	15	1.0
MAY 14...	1215	16	6.0	2.5	15	1.0
JUN 26...	1645	17	17.5	9.0	5	1.0
JUL 21...	1045	2.4	12.0	10.5	5	0.50
AUG 19...	1415	9.1	11.5	8.5	10	0.30
SEP 18...	0910	1.1	7.0	5.5	5	0.60

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN 08...	1150	4.8	25	6.90	-1.0	0.0	30	0.40	E1	11	4
MAY 14...	1215	16	23	6.80	6.0	2.5	15	1.0	K3	17	8
JUL 21...	1045	2.4	40	7.10	12.0	10.5	5	0.50	K1	16	1

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)
JAN 08...	3.7	0.40	1.0	8	7.0	9.0	1.5	0.87	0.03	3.0	21
MAY 14...	6.1	0.40	0.90	9	9.0	10	1.2	0.55	0.03	2.7	18
JUL 21...	5.3	0.60	1.1	14	15	18	2.1	0.33	0.03	4.1	26

E ESTIMATED
K NON-IDEAL COLONY COUNT

15108818 KOWEE C (TREADWELL DITCH FOOTBRIDGE) NR JUNEAU AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)
JAN 08...	0.110	<0.010	<1	<2	<0.5	<1	<10	<3	<10	59
MAY 14...	0.120	<0.010	<1	14	<0.5	<1	<10	<3	<10	60
JUL 21...	0.070	<0.010	<1	3	<0.5	<1	<10	<3	<10	20

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
JAN 08...	<10	<4	1	<0.1	<10	<1	<1	28	<6	<3
MAY 14...	<10	<4	3	<0.1	<10	<1	<1	24	<6	59
JUL 21...	<10	<4	2	<0.1	<10	<1	<1	36	<6	4

15108950 FISH C TR AT EAGLECREST RD NR JUNEAU AK

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)
OCT 17...	1750	25	5.0	3.5	40	0.60
NOV 18...	1405	3.1	-12.0	0.0	10	0.40
DEC 13...	1220	1.9	-2.0	0.0	7	0.40
JAN 09...	1215	5.7	-1.0	0.0	20	0.50
FEB 13...	1348	2.2	-0.5	0.0	10	0.30
MAR 06...	1150	5.9	-2.0	0.0	20	0.60
APR 15...	1310	2.0	6.0	0.5	5	1.2
MAY 15...	1245	11	5.0	2.5	15	1.2
JUN 13...	1315	28	18.0	6.0	5	1.0
JUL 22...	1345	16	12.5	8.0	5	1.0
AUG 19...	1130	13	13.0	8.0	10	0.30
SEP 17...	1305	2.2	10.0	5.5	5	0.50

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN 09...	1215	5.7	35	7.20	-1.0	0.0	20	0.50	K2	15	2
MAY 15...	1245	11	28	7.00	5.0	2.5	15	1.2	K1	14	3
JUL 22...	1345	16	26	7.10	12.5	8.0	5	1.0	K1	11	1

K NON-IDEAL COLONY COUNT

15108950 FISH C TR AT EAGLECREST RD NR JUNEAU AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)
JAN 09...	4.6	0.80	0.90	13	13	15	1.8	0.78	0.03	3.1	22
MAY 15...	4.4	0.70	0.80	10	11	13	1.3	0.74	0.02	2.6	18
JUL 22...	3.6	0.50	<0.20	11	10	12	1.0	0.33	0.02	1.8	14

DATE	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ARSENIC DIS-SOLVED (UG/L AS AS) (01000)	BARIUM, DIS-SOLVED (UG/L AS BA) (01005)	BERYL-LIUM, DIS-SOLVED (UG/L AS BE) (01010)	CADMIUM DIS-SOLVED (UG/L AS CD) (01025)	CHRO-MIUM, DIS-SOLVED (UG/L AS CR) (01030)	COBALT, DIS-SOLVED (UG/L AS CO) (01035)	COPPER, DIS-SOLVED (UG/L AS CU) (01040)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
JAN 09...	0.020	<0.010	<1	<2	<0.5	<1	<10	<3	<10	45
MAY 15...	0.010	<0.010	<1	12	<0.5	<1	<10	<3	<10	29
JUL 22...	<0.010	<0.010	<1	3	<0.5	<1	<10	<3	<10	11

DATE	LEAD, DIS-SOLVED (UG/L AS PB) (01049)	LITHIUM DIS-SOLVED (UG/L AS LI) (01130)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY DIS-SOLVED (UG/L AS HG) (71890)	MOLYB-DENUM, DIS-SOLVED (UG/L AS MO) (01060)	SELE-NIUM, DIS-SOLVED (UG/L AS SE) (01145)	SILVER, DIS-SOLVED (UG/L AS AG) (01075)	STRON-TIUM, DIS-SOLVED (UG/L AS SR) (01080)	VANA-DIUM, DIS-SOLVED (UG/L AS V) (01085)	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)
JAN 09...	<10	<4	<1	<0.1	<10	<1	<1	20	<6	6
MAY 15...	<10	<4	1	<0.1	<10	<1	<1	19	<6	16
JUL 22...	<10	<4	2	<0.1	<10	<1	<1	17	<6	3

15108990 FISH C TR (LOWER) BL CONF NR JUNEAU AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	COLOR (PLAT-INUM-COBALT UNITS) (00080)	TUR-BID-ITY (NTU) (00076)
OCT 17...	1700	7.1	10.5	5.0	140	0.60
DEC 13...	1120	0.43	-2.0	0.0	60	1.4
JAN 09...	1115	1.0	0.0	0.0	90	0.60
FEB 13...	1300	0.27	0.5	0.0	50	0.50
MAR 06...	1055	0.64	-2.0	0.0	70	0.70
APR 15...	1145	0.31	6.0	0.5	40	1.0
MAY 15...	1145	1.1	7.5	3.5	70	1.0
JUN 13...	1205	0.60	18.0	7.5	60	1.2
JUL 22...	1206	0.12	12.5	11.5	30	1.0
AUG 19...	1226	1.2	11.0	9.0	100	0.50
SEP 17...	1150	0.11	10.0	6.0	50	0.70

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTHEAST ALASKA--Continued

15108990 FISH C TR (LOWER) BL CONF NR JUNEAU AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN 09...	1115	1.0	20	6.80	0.0	0.0	90	0.60	K3	9	3
MAY 15...	1145	1.1	28	7.00	7.5	3.5	70	1.0	K5	15	5
JUL 22...	1206	0.12	27	7.30	12.5	11.5	30	1.0	K6	23	3

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)
JAN 09...	2.8	0.60	0.80	6	6.0	7.0	0.7	0.77	0.02	2.8	19
MAY 15...	4.8	0.70	0.90	10	10	12	1.2	0.60	0.02	3.1	28
JUL 22...	7.0	1.3	1.6	21	20	24	2.1	0.51	0.05	4.6	38

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)
JAN 09...	< 0.010	< 0.010	< 1	3	< 0.5	< 1	< 10	< 3	< 10	290
MAY 15...	< 0.010	< 0.010	< 1	15	< 0.5	< 1	< 10	< 3	< 10	180
JUL 22...	0.010	< 0.010	< 1	4	< 0.5	< 1	< 10	< 3	< 10	74

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
JAN 09...	< 10	< 4	6	< 0.1	< 10	< 1	< 1	17	< 6	5
MAY 15...	< 10	< 4	1	< 0.1	< 10	< 1	< 1	25	< 6	20
JUL 22...	< 10	< 4	3	< 0.1	< 10	< 1	< 1	40	< 6	6

K NON-IDEAL COLONY COUNT

SOUTHEAST ALASKA--Continued

15109045 PETERSON C TR NR DOUGLAS AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)
OCT 16...	1000	2.0	10.5	5.0	70	1.1
NOV 18...	1140	0.60	-3.0	2.0	70	0.60
DEC 13...	1020	0.25	-2.0	0.5	35	1.1
JAN 09...	1000	3.8	0.0	0.5	110	1.0
FEB 13...	1144	1.0	-0.5	0.0	55	0.70
MAR 06...	0950	1.8	-1.0	0.0	70	0.70
APR 15...	1350	0.87	5.0	1.5	50	1.0
MAY 15...	1030	2.6	7.0	4.0	60	1.2
JUN 13...	1045	2.7	14.0	6.5	30	0.80
JUL 22...	1045	1.2	12.5	11.0	20	1.0
AUG 18...	1430	3.4	--	--	80	0.60
SEP 17...	1040	0.29	7.5	7.0	40	1.0

DATE	TIME	STREAM-FLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE, AIR (DEG C) (00020)	TEMPERATURE (DEG C) (00010)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	COLIFORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)
JAN 09...	1000	3.8	38	6.90	0.0	0.5	110	1.0	K4	16	6
MAY 15...	1030	2.6	38	6.80	7.0	4.0	60	1.2	27	20	10
JUL 22...	1045	1.2	49	6.90	12.5	11.0	20	1.0	K29	20	2

DATE	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, RESIDUE AT 18C DEG. C DISSOLVED (MG/L) (70300)
JAN 09...	4.7	1.0	2.0	11	10	13	1.4	2.1	0.04	4.8	40
MAY 15...	6.1	1.1	1.7	10	10	12	1.5	1.4	0.03	4.6	42
JUL 22...	6.1	1.1	1.4	19	18	21	1.3	0.64	0.05	3.9	34

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT WATER-QUALITY PARTIAL-RECORD STATIONS

SOUTHEAST ALASKA--Continued

15109045 PETERSON C TR NR DOUGLAS AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ARSENIC DISSOLVED (UG/L AS AS) (01000)	BARIUM, DISSOLVED (UG/L AS BA) (01005)	BERYLLIUM, DISSOLVED (UG/L AS BE) (01010)	CADMIUM DISSOLVED (UG/L AS CD) (01025)	CHROMIUM, DISSOLVED (UG/L AS CR) (01030)	COBALT, DISSOLVED (UG/L AS CO) (01035)	COPPER, DISSOLVED (UG/L AS CU) (01040)	IRON, DISSOLVED (UG/L AS FE) (01046)
JAN 09...	0.020	<0.010	<1	16	<0.5	<1	<10	<3	<10	300
MAY 15...	<0.010	<0.010	<1	6	<0.5	<1	<10	<3	<10	180
JUL 22...	0.010	<0.010	<1	7	<0.5	<1	<10	<3	<10	130

DATE	LEAD, DISSOLVED (UG/L AS PB) (01049)	LITHIUM DISSOLVED (UG/L AS LI) (01130)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY DISSOLVED (UG/L AS HG) (71890)	MOLYBDENUM, DISSOLVED (UG/L AS MO) (01060)	SELENIUM, DISSOLVED (UG/L AS SE) (01145)	SILVER, DISSOLVED (UG/L AS AG) (01075)	STRONTIUM, DISSOLVED (UG/L AS SR) (01080)	VANADIUM, DISSOLVED (UG/L AS V) (01085)	ZINC, DISSOLVED (UG/L AS ZN) (01090)
JAN 09...	<10	<4	13	<0.1	<10	<1	<1	39	<6	14
MAY 15...	<10	<4	10	<0.1	<10	<1	3	39	<6	12
JUL 22...	10	<4	12	<0.1	<10	<1	<1	41	<6	6

15272503 VIRGIN C AT GIRDWOOD AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM WIDTH (FT) (00004)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
FEB										
25...	1340	18.0	9.00	3.0	87	8.00	0.0	729	12.5	89

15272530 CALIFORNIA C AT GIRDWOOD AK

DATE	TIME	STREAM WIDTH (FT) (00004)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
FEB										
25...	1130	6.70	3.40	0.76	111	7.50	0.0	733	12.5	89

15272550 GLACIER C AT GIRDWOOD AK

DATE	TIME	STREAM WIDTH (FT) (00004)	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
FEB										
25...	1507	26.0	23.0	44	122	7.50	0.0	737	11.4	81

610922149522800 CAMPBELL C AB L CAMPBELL C NR ANCHORAGE AK

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
APR												
23...	1445	--	18	110	7.40	0.0	3.7	759	12.6	87	K18	90
24...	1530	--	20	109	7.30	0.0	4.5	758	12.8	88	38	310
JUN												
16...	1530	31.0	120	68	7.50	13.0	8.0	756	9.8	94	39	31
SEP												
08...	1215	29.5	90	71	7.60	7.0	2.0	750	11.1	93	93	K42

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	HARDNESS (MG/L AS CACO3) (00900)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NITRATE TOTAL (MG/L AS N) (00620)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)
APR												
23...	1445	18	50	4.1	39	36	44	0	70	1	--	<0.010
24...	1530	20	42	5.7	34	31	38	0	74	1	0.290	0.010
JUN												
16...	1530	120	28	0.50	23	21	26	0	36	130	--	<0.010
SEP												
08...	1215	90	39	1.0	30	29	35	0	45	3	--	<0.010

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

610922149522800 CAMPBELL C AB L CAMPBELL C NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	ANTIMONY, TOTAL (UG/L AS SB) (01097)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)
APR											
23...	0.300	<0.010	<1	<1	<10	<1	4	3	610	1	<0.10
24...	0.300	0.010	<1	<1	<10	<1	4	5	740	3	<0.10
JUN											
16...	<0.100	<0.010	<1	<1	<10	<1	29	4	2000	<5	0.20
SEP											
08...	<0.100	<0.010	<1	<1	<10	<1	3	<1	360	<5	<0.10

DATE	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	THALLIUM, TOTAL (UG/L AS TL) (01059)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVIMETRIC (MG/L) (00556)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
APR											
23...	<1	<1	<1	<1	20	2.5	<0.010	<1	8	0.39	--
24...	2	<1	<1	<1	30	4.0	<0.010	<1	16	0.86	--
JUN											
16...	1	<1	<1	<1	10	1.9	<0.010	<1	72	23	--
SEP											
08...	1	<1	<1	<1	<10	3.3	<0.010	<1	13	3.2	44

DATE	TIME	DICHLOROBROMOMETHANE TOTAL (UG/L) (32101)	CARBONTETRACHLORIDE TOTAL (UG/L) (32102)	1,2-DICHLOROETHANE TOTAL (UG/L) (32103)	BROMOFORM TOTAL (UG/L) (32104)	CHLORODIBROMOMETHANE TOTAL (UG/L) (32105)	CHLOROFORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACENAPHTHYLENE TOTAL (UG/L) (34200)	ACENAPHTHENE TOTAL (UG/L) (34205)	ANTHRACENE TOTAL (UG/L) (34220)
APR												
23...	1445	--	--	--	--	--	--	--	--	--	--	--
24...	1530	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0
JUN												
16...	1530	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0
SEP												
08...	1215	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<5.0	<5.0	<5.0

DATE	BENZO B FLUORANTHENE TOTAL (UG/L) (34230)	BENZO K FLUORANTHENE TOTAL (UG/L) (34242)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	DELTA BENZENE HEXACHLORIDE TOTAL (UG/L) (34259)	BIS 2-CHLOROETHYL ETHER TOTAL (UG/L) (34273)	BIS (2-CHLOROETHOXY) METHANE TOTAL (UG/L) (34278)	BIS (2-CHLOROISOPROPYL) ETHER TOTAL (UG/L) (34283)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L) (34292)	CHLOROBENZENE TOTAL (UG/L) (34301)	CHLOROETHANE TOTAL (UG/L) (34311)	CHRYSENE TOTAL (UG/L) (34320)	DIETHYL PHTHALATE TOTAL (UG/L) (34336)
APR												
23...	--	--	--	--	--	--	--	--	--	--	--	--
24...	<10.0	<10.0	<10.0	--	<5.0	<5.0	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0
JUN												
16...	<10.0	<10.0	<10.0	<0.01	<5.0	<5.0	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0
SEP												
08...	<10.0	<10.0	<10.0	--	<5.0	<5.0	<5.0	<5.0	<0.20	<0.20	<10.0	<5.0

DATE	DIMETHYL PHTHALATE TOTAL (UG/L) (34341)	ETHYLBENZENE TOTAL (UG/L) (34371)	FLUORANTHENE TOTAL (UG/L) (34376)	FLUORENE TOTAL (UG/L) (34381)	HEXACHLOROCYCLOPENTADIENE TOTAL (UG/L) (34386)	HEXACHLOROETHANE TOTAL (UG/L) (34396)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L) (34403)	ISOPHORONE TOTAL (UG/L) (34408)	METHYLBROMIDE TOTAL (UG/L) (34413)	METHYLCHLORIDE TOTAL (UG/L) (34418)	METHYLENE CHLORIDE TOTAL (UG/L) (34423)	N-NITROSODI-N-PROPYLAMINE TOTAL (UG/L) (34428)
APR												
23...	--	--	--	--	--	--	--	--	--	--	--	--
24...	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0
JUN												
16...	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<0.20	<0.20	<1.0	<5.0
SEP												
08...	<5.0	<0.20	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<0.20	<0.20	<8.0	<5.0

SOUTH-CENTRAL ALASKA--Continued

610922149522800 CAMPBELL C AB L CAMPBELL C NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	N-NITRO-SODI-PHENY-LAMINE TOTAL (UG/L) (34433)	N-NITRO-SODI-METHY-LAMINE TOTAL (UG/L) (34438)	NITRO-BENZENE TOTAL (UG/L) (34447)	PARA-CHLORO-META CRESOL TOTAL (UG/L) (34452)	PHENAN-THRENE TOTAL (UG/L) (34461)	PYRENE TOTAL (UG/L) (34469)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)
APR 23...	--	--	--	--	--	--	--	--	--	--	--	--
24...	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
JUN 16...	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
SEP 08...	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

DATE	1,1,2,2 TETRA-CHLORO-ETHANE TOTAL (UG/L) (34516)	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE TOTAL (UG/L) (34521)	BENZO A ANTHRAC ENE1,2-BENZANT HRACENE TOTAL (UG/L) (34526)	1,2-DI-CHLORO-BENZENE TOTAL (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHYL-ENE TOTAL (UG/L) (34546)	1,2,4-TRI-CHLORO-BENZENE TOTAL (UG/L) (34551)	1,2,5,6 -DIBENZ -ANTHRA -CENE TOTAL (UG/L) (34556)	1,3-DI-CHLORO-PROPANE TOTAL (UG/L) (34561)	1,3-DI-CHLORO-BENZENE TOTAL (UG/L) (34566)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L) (34571)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L) (34576)
APR 23...	--	--	--	--	--	--	--	--	--	--	--	--
24...	<0.20	<10.0	<5.0	<0.20	<0.20	<0.20	<5.0	<10.0	<0.20	<0.20	<0.20	<0.20
JUN 16...	<0.20	<10.0	<10.0	<0.20	<0.20	<0.20	<5.0	<10.0	<0.20	<0.20	<0.20	<0.20
SEP 08...	<0.20	<10.0	<10.0	<0.20	<0.20	<0.20	<5.0	<10.0	<0.20	<0.20	<0.20	<0.20

DATE	2-CHLORO-NAPH-THALENE TOTAL (UG/L) (34581)	2-CHLORO-PHENOL TOTAL (UG/L) (34586)	2-NITRO-PHENOL TOTAL (UG/L) (34591)	DI-N-OCTYL PHTHAL-ATE TOTAL (UG/L) (34596)	2,4-DI-CHLORO-PHENOL TOTAL (UG/L) (34601)	2,4-DI-METHYL-PHENOL TOTAL (UG/L) (34606)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L) (34611)	2,4,-DI-NITRO-PHENOL TOTAL (UG/L) (34616)	2,4,6-TRI-CHLORO-PHENOL TOTAL (UG/L) (34621)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L) (34626)	4-BROMO-PHENYL PHENYL ETHER TOTAL (UG/L) (34636)
APR 23...	--	--	--	--	--	--	--	--	--	--	--
24...	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0	<5.0
JUN 16...	<5.0	<6.0	<6.0	<10.0	<6.0	<6.0	<5.0	<20.0	<5.0	<5.0	<5.0
SEP 08...	<5.0	<6.0	<6.0	<10.0	<6.0	<6.0	<5.0	<20.0	<5.0	<5.0	<5.0

DATE	4-CHLORO-PHENYL PHENYL ETHER TOTAL (UG/L) (34641)	4-NITRO-PHENOL TOTAL (UG/L) (34646)	4,6-DINITRO-ORTHO-CRESOL TOTAL (UG/L) (34657)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	AROCLOR 1016 PCB TOTAL (UG/L) (34671)	PHENOL (C6H-5OH) TOTAL (UG/L) (34694)	NAPHTH-ALENE TOTAL (UG/L) (34696)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	PENTA-CHLORO-PHENOL TOTAL (UG/L) (39032)	PER-THANE TOTAL (UG/L) (39034)
APR 23...	--	--	--	--	--	--	--	--	--	--	--
24...	<5.0	<30.0	<30.0	<0.20	<0.1	<5.0	<5.0	<0.20	<0.20	<30.0	<0.1
JUN 16...	<5.0	<30.0	<30.0	<0.20	<0.1	<6.0	<5.0	<0.20	<0.20	<30.0	<0.1
SEP 08...	<5.0	<30.0	<30.0	<0.20	<0.1	<6.0	<5.0	<0.20	<0.20	<30.0	<0.1

DATE	1,2-DIBROMO ETHYL-ENE TOTAL (UG/L) (39082)	BIS(2-ETHYL HEXYL) PHTHAL-ATE TOTAL (UG/L) (39100)	DI-N-BUTYL PHTHAL-ATE TOTAL (UG/L) (39110)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	NAPH-THA-LENES, POLY-CHLOR. TOTAL (UG/L) (39250)	ALDRIN, TOTAL (UG/L) (39330)	ALPHA BHC TOTAL (UG/L) (39337)	BETA BENZENE HEXA-CHLOR-IDE TOTAL (UG/L) (39338)	LINDANE TOTAL (UG/L) (39340)	CHLOR-DANE, TOTAL (UG/L) (39350)
APR 23...	--	--	--	--	--	--	--	--	--	--	--
24...	<0.2	<5.0	<5.0	<0.20	<0.2	<0.10	<0.010	--	--	<0.010	<0.1
JUN 16...	<0.2	<5.0	<5.0	<0.20	<0.2	<0.10	<0.010	<0.01	<0.01	<0.010	<0.1
SEP 08...	<0.2	<5.0	<5.0	<0.20	<0.2	<0.10	<0.010	--	--	<0.010	<0.1

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

610922149522800 CAMPBELL C AB L CAMPBELL C NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DIELDRIN TOTAL (UG/L) (39380)	ENDOSULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	TOXAPHENE, TOTAL (UG/L) (39400)	HEPTACHLOR, TOTAL (UG/L) (39410)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	METHOXYCHLOR, TOTAL (UG/L) (39480)	AROCLOR 1221 PCB TOTAL (UG/L) (39488)
APR											
23...	--	--	--	--	--	--	--	--	--	--	--
24...	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.01	<0.1
JUN											
16...	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.01	<0.1
SEP											
08...	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<1	<0.010	<0.010	<0.01	<0.1

DATE	AROCLOR 1232 PCB TOTAL (UG/L) (39492)	AROCLOR 1242 PCB TOTAL (UG/L) (39496)	AROCLOR 1248 PCB TOTAL (UG/L) (39500)	AROCLOR 1254 PCB TOTAL (UG/L) (39504)	AROCLOR 1260 PCB TOTAL (UG/L) (39508)	PCB, TOTAL (UG/L) (39516)	HEXACHLOROBENZENE TOTAL (UG/L) (39700)	HEXACHLOROBUTADIENE TOTAL (UG/L) (39702)	MIREX, TOTAL (UG/L) (39755)	STYRENE TOTAL (UG/L) (77128)	XYLENE WATER WHOLE TOT REC (UG/L) (81551)
APR											
23...	--	--	--	--	--	--	--	--	--	--	--
24...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.01	<0.2	--
JUN											
16...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.01	<0.2	--
SEP											
08...	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<5.0	<5.0	<0.01	<0.2	<0.2

611042149501000 CAMPBELL C AT LAKE OTIS PKWY NR ANCHORAGE AK

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	TURBIDITY (NTU) (00076)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
APR												
22...	1210	--	18	96	7.40	0.0	1.0	758	12.9	89	K59	90
24...	1100	--	14	94	7.20	0.0	1.0	758	13.2	91	K24	K24
JUN												
16...	1300	40.0	127	60	7.50	11.0	5.0	753	10.0	92	36	K22
SEP												
08...	1510	35.0	87	69	--	7.0	1.0	750	12.4	104	90	K2

DATE	TIME	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	HARDNESS (MG/L AS CACO3) (00900)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	SOLIDS, RESIDUE AT 180 DEG. C DISSOLVED (MG/L) (70300)	SOLIDS, RESIDUE AT 105 DEG. C, SUSPENDED (MG/L) (00530)	NITROGEN, NITRITE TOTAL (MG/L AS N) (00615)
APR											
22...	1210	18	40	2.2	34	30	37	0	65	1	<0.010
24...	1100	14	42	1.6	33	32	39	0	63	2	<0.010
JUN											
16...	1300	127	24	0.40	22	20	25	0	39	24	<0.010
SEP											
08...	1510	87	34	1.8	26	26	31	0	52	1	<0.010

DATE	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOSPHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	ANTIMONY, TOTAL (UG/L AS SB) (01097)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)
APR											
22...	0.300	<0.010	<1	<1	<10	<1	7	4	300	1	<0.10
24...	0.300	<0.010	<1	<1	<10	<1	4	2	220	1	<0.10
JUN											
16...	<0.100	<0.010	<1	<1	<10	<1	25	3	1400	<5	<0.10
SEP											
08...	<0.100	<0.010	<1	<1	<10	<1	6	1	140	<5	<0.10

K NON-IDEAL COLONY COUNT

611042149501000 CAMPBELL C AT LAKE OTIS PKWY NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NICKEL, TOTAL RECOV- ERABLE (UG/L AS NI) (01067)	SELE- NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV- ERABLE (UG/L AS AG) (01077)	THAL- LIUM, TOTAL (UG/L AS TL) (01059)	ZINC, TOTAL RECOV- ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI- METRIC (MG/L) (00556)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
APR											
22...	10	<1	<1	<1	30	1.9	<0.010	<1	4	0.19	--
24...	<1	<1	<1	<1	<10	1.8	<0.010	<1	3	0.11	--
JUN											
16...	<1	<1	<1	<1	10	1.9	<0.010	<1	49	17	--
SEP											
08...	1	<1	<1	<1	<10	2.0	<0.010	<1	6	1.4	53

15274490 L CAMPBELL C AT WOODBOURNE DR AT ANCHORAGE AK

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE, AIR (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)
JUN							
10...	1200	0.50	123	7.90	--	5.5	1.0
25...	1000	0.40	122	8.00	10.5	5.5	1.0
JUL							
14...	1315	0.35	133	7.80	--	8.5	0.60
28...	1040	0.38	121	7.90	14.0	7.5	0.50
AUG							
11...	1107	0.39	117	8.00	--	7.5	0.50
25...	1200	0.48	126	8.10	--	7.0	0.50
SEP							
10...	1115	0.45	128	8.20	7.0	4.0	0.50
24...	1247	1.1	113	7.70	--	3.0	0.90

DATE	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	COLI- FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP- TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI- MENT, SUS- PENDED (MG/L) (80154)	SEDI- MENT, DIS- CHARGE, SUS- PENDED (T/DAY) (80155)
JUN							
10...	730	11.5	95	<1	K2	3	0.00
25...	732	10.6	88	<1	K3	10	0.01
JUL							
14...	736	10.6	94	K2	K4	2	0.00
28...	730	11.1	97	K2	K3	1	0.00
AUG							
11...	725	11.3	99	380	K21	--	--
25...	727	11.8	102	100	100	2	0.00
SEP							
10...	736	11.9	94	46	32	1	0.00
24...	726	13.0	101	97	K17	3	0.01

15274495 L CAMPBELL C AT HILLSIDE DR AT ANCHORAGE AK

DATE	TIME	STREAM- FLOW, INSTAN- TANEOUS (CFS) (00061)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE, AIR (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	TUR- BID- ITY (NTU) (00076)
JUL							
28...	1230	0.72	175	8.20	18.0	7.5	2.5
AUG							
11...	1152	0.76	177	8.30	14.0	7.0	4.5
25...	1220	0.86	172	8.20	--	6.5	1.2
SEP							
10...	1045	0.77	174	8.20	--	3.5	1.5
24...	1313	1.6	146	7.90	--	3.0	3.5

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

15274495 L CAMPBELL C AT HILLSIDE DR AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JUL							
28...	742	10.7	92	K15	K10	8	0.02
AUG							
11...	738	11.4	97	75	30	10	0.02
25...	739	11.4	96	25	35	5	0.01
SEP							
10...	750	11.9	91	460	K13	4	0.01
24...	739	12.7	97	1200	K19	12	0.05

15274500 L CAMPBELL C NR ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
JUN										
05...	1715	0.98	157	8.00	14.0	9.5	3.5	745	10.0	90
10...	1300	0.79	165	8.10	--	11.0	1.0	752	10.0	92
25...	1130	0.58	171	8.10	14.5	10.5	0.50	759	9.8	88
JUL										
14...	1410	1.0	173	8.10	19.0	14.5	1.3	757	9.2	91
28...	1345	0.73	177	8.00	--	14.0	3.0	750	8.9	88
AUG										
11...	1245	0.85	176	8.20	--	12.5	2.0	746	9.6	92
13...	1245	3.7	160	8.20	--	11.0	16	754	10.3	94
25...	1300	0.97	182	8.10	--	10.5	1.6	748	9.9	90
SEP										
09...	1210	1.4	179	8.10	--	8.5	1.5	752	11.2	97
20...	0800	1.5	193	8.40	--	9.0	--	742	12.1	108
20...	1125	1.6	191	8.40	--	9.5	--	742	10.9	98
20...	1354	1.6	186	8.40	--	10.0	--	743	10.6	96
20...	1750	1.2	187	8.30	--	10.0	--	743	10.6	96
20...	1800	2.0	187	8.40	--	10.0	--	743	10.9	99
20...	1805	2.0	183	8.30	--	10.0	--	743	10.4	95
22...	1755	2.1	183	8.20	--	8.5	--	736	10.0	89
22...	2045	3.1	188	8.20	--	8.0	--	737	9.9	86
23...	1100	4.1	177	8.10	--	5.5	--	746	12.1	98
23...	1650	3.6	179	8.00	--	6.0	--	749	11.9	97
24...	1357	2.4	179	8.00	--	5.5	3.4	746	11.9	96

K NON-IDEAL COLONY COUNT

15274500 L CAMPBELL C NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUN										
05...	1715	0.98	25	640	--	--	--	11	0.03	--
10...	1300	0.79	K14	K6	--	--	--	4	0.01	--
25...	1130	0.58	150	K8	--	--	--	2	0.00	--
JUL										
14...	1410	1.0	100	K8	--	--	--	10	0.03	--
28...	1345	0.73	K650	310	--	--	--	7	0.01	--
AUG										
11...	1245	0.85	67	K7	--	--	--	11	0.02	--
13...	1245	3.7	200	320	2400	<5	10	149	1.5	41
25...	1300	0.97	K15	K11	--	--	--	5	0.01	--
29...	1610	0.83	K5	K2	--	--	--	--	--	--
SEP										
09...	1210	1.4	K19	K16	--	--	--	9	0.03	54
19...	2100	1.3	--	--	--	--	--	15	0.05	--
20...	0800	1.5	K14	--	720	<5	140	--	--	--
20...	1100	1.6	K16	--	520	<5	180	--	--	--
20...	1400	1.6	K9	--	920	<5	130	--	--	--
20...	1401	1.6	--	--	--	--	--	34	0.15	--
20...	1700	1.6	K12	--	440	<5	170	--	--	--
20...	1801	2.0	--	--	--	--	--	303	1.6	65
22...	1640	3.6	--	--	--	--	--	9	0.09	--
22...	1800	2.1	K30	--	610	<5	130	--	--	--
22...	1801	2.1	--	--	--	--	--	22	0.12	67
22...	2045	3.1	--	--	--	--	--	126	1.1	--
22...	2100	3.1	67	--	3700	<5	230	--	--	--
22...	2335	4.9	--	--	--	--	--	357	4.7	--
23...	0300	5.4	1900	--	14000	<5	180	--	--	--
23...	1100	4.1	480	--	2300	<5	390	--	--	--
23...	1101	4.1	--	--	--	--	--	128	1.4	64
23...	1650	3.6	--	--	--	--	--	50	0.49	--
24...	1357	2.4	38	80	--	--	--	16	0.10	--

610733149471300 L CAMPBELL C AT OUR RD AT ANCHORAGE AK

DATE	TIME	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
AUG			
29...	1605	K5	K14
SEP			
09...	1330	28	31

15274505 L CAMPBELL C AT LIPSCOMB ST AT ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)
JUN							
10...	1450	1.2	215	8.10	--	12.5	5.0
25...	1245	0.95	220	8.10	15.0	10.0	2.5
JUL							
14...	1530	1.1	214	8.00	16.0	14.5	6.4
28...	1520	0.70	224	7.90	--	14.5	27
AUG							
11...	1358	1.1	221	8.00	--	11.5	6.6
25...	1430	1.3	217	8.00	--	9.5	3.9
29...	1615	--	--	--	--	--	--
SEP							
09...	1340	1.8	212	8.10	--	8.5	4.0
24...	1309	2.9	203	7.90	--	5.0	7.7

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

SOUTH-CENTRAL ALASKA--Continued

15274505 L CAMPBELL C AT LIPSCOMB ST AT ANCHORAGE AK--Continued

WATER-QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JUN							
10...	757	9.5	90	520	1200	16	0.05
25...	763	10.0	88	280	340	11	0.03
JUL							
14...	761	9.3	51	870	1000	30	0.09
28...	756	9.2	91	>2000	1400	501	0.95
AUG							
11...	752	9.9	92	1700	>3000	27	0.08
25...	754	10.7	95	>6000	>10000	16	0.06
29...	--	--	--	800	>10000	--	--
SEP							
09...	759	11.3	97	700	>10000	15	0.07
24...	753	11.9	94	560	>10000	28	0.22

610715149443700 CRAIG C AT HILLSIDE DR AT ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)
JUN							
10...	1015	0.18	218	8.10	--	3.5	0.50
25...	1040	0.18	226	8.10	15.0	4.5	0.50
JUL							
14...	1345	0.21	218	7.80	20.0	6.5	0.60
28...	1125	0.18	230	8.10	18.0	6.0	0.50

DATE	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JUN							
10...	742	11.9	92	<1	K10	1	0.00
25...	750	11.2	88	K5	K4	1	0.00
JUL							
14...	750	11.2	93	K4	K1	2	0.00
28...	744	11.6	95	--	--	1	0.00

15274510 CRAIG C AT BIRCH RD AT ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)
JUN							
05...	1630	0.12	216	7.20	13.5	6.0	0.50
10...	1330	0.07	227	7.60	--	9.5	1.0
25...	1200	0.01	246	7.70	14.0	9.5	1.0
JUL							
14...	1450	0.08	241	7.40	18.0	12.5	0.70
28...	1423	0.02	253	7.70	--	13.5	4.0
AUG							
11...	1330	0.06	247	7.50	--	11.5	0.50
25...	1355	0.09	241	7.60	--	9.0	6.3
SEP							
09...	1300	0.14	237	7.60	--	8.0	1.0
24...	1440	0.24	220	7.50	--	4.5	0.90

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

15274310 CRAIG C AT BIRCH RD AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JUN							
05...	749	8.8	72	K8	<1	17	0.01
10...	753	7.6	67	K2	K1	3	0.00
25...	760	8.7	76	K2	K14	3	0.00
JUL							
14...	759	7.9	74	90	230	3	0.00
28...	753	8.5	83	K18	K17	11	0.00
AUG							
11...	749	8.4	78	K9	34	1	0.00
25...	750	8.6	76	120	280	8	0.00
SEP							
09...	755	10.0	85	59	110	5	0.00
24...	749	10.4	82	K17	48	5	0.00

610751149475500 L CAMPBELL C BL CRAIG C AT ANCHORAGE AK

DATE	TIME	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
AUG			
29...	1555	K300	>10000

15274520 L CAMPBELL C AT ABBOTT RD NR ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)
JUN										
05...	1545	1.6	216	8.10	10.5	6.5	3.0	756	10.5	86
10...	1540	1.4	126	8.30	--	10.0	2.0	760	10.0	89
25...	1415	0.74	241	8.40	17.0	8.5	1.5	767	11.2	95
JUL										
14...	1610	0.95	232	8.20	17.0	11.5	1.2	764	10.0	92
28...	1612	0.70	246	8.20	--	11.0	2.0	759	9.8	89
AUG										
11...	1455	1.3	240	8.30	--	9.5	3.5	755	10.2	90
13...	1150	6.4	181	7.80	--	8.0	30	762	10.8	91
25...	1510	1.9	234	8.20	--	8.0	3.3	757	10.5	89
SEP										
09...	1430	2.1	225	8.20	--	7.0	4.0	762	11.2	92
20...	0800	2.0	239	8.40	--	7.5	--	751	11.7	99
20...	1155	2.2	231	8.20	--	8.0	--	752	11.4	98
20...	1333	2.2	232	8.30	--	8.0	--	752	11.0	94
20...	1730	2.3	227	8.20	--	9.0	--	752	11.2	98
22...	1830	2.5	222	8.10	--	7.5	--	745	10.1	86
22...	2110	3.0	217	8.00	--	7.0	--	746	9.9	83
23...	1000	6.2	179	7.70	--	5.5	--	755	11.4	91
23...	1625	6.2	187	7.80	--	5.5	--	757	11.3	90
24...	1545	3.7	201	8.00	--	4.0	8.3	757	12.2	94

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

15274520 L CAMPBELL C AT ABBOTT RD NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
JUN										
05...	1545	1.6	K63	630	--	--	--	76	0.33	--
10...	1540	1.4	K26	130	--	--	--	11	0.04	--
25...	1415	0.74	130	230	--	--	--	5	0.01	--
JUL										
14...	1610	0.95	600	460	--	--	--	9	0.02	--
28...	1612	0.70	>2000	210	--	--	--	9	0.02	--
AUG										
11...	1455	1.3	930	>3300	--	--	--	22	0.08	--
13...	1150	6.4	4300	>3300	3200	<5	20	239	4.1	48
25...	1510	1.9	670	>10000	--	--	--	11	0.06	--
SEP										
09...	1430	2.1	K500	7700	--	--	--	18	0.10	77
19...	1630	1.8	--	--	--	--	--	22	0.11	--
20...	0800	2.0	490	--	730	<5	190	--	--	--
20...	1100	2.2	620	--	430	<5	230	--	--	--
20...	1201	2.2	--	--	--	--	--	18	0.11	79
20...	1400	2.2	280	--	400	<5	120	--	--	--
20...	1700	2.3	330	--	420	<5	120	--	--	--
22...	1745	2.3	--	--	--	--	--	12	0.08	--
22...	1800	5.9	K120	--	330	<5	160	--	--	--
22...	2100	6.1	1500	3500	1300	<5	230	--	--	--
22...	2101	2.9	--	--	--	--	--	47	0.37	67
22...	2355	3.8	--	--	--	--	--	136	1.4	--
23...	0800	5.9	3300	5900	2500	<5	320	--	--	--
23...	1001	6.2	--	--	--	--	--	182	3.0	--
23...	1100	6.2	5900	--	2300	<5	270	--	--	--
23...	1625	6.2	--	--	--	--	--	79	1.3	--
24...	1545	3.7	390	>10000	--	--	--	40	0.40	--

15274530 L CAMPBELL C AT DIMOND HOOK DR AT ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)
JUN							
11...	1040	1.0	228	8.60	--	7.5	2.0
25...	1500	0.70	241	8.80	15.0	12.0	1.0
JUL							
15...	0930	0.90	242	8.40	14.0	11.0	1.1
29...	0952	0.78	249	8.40	15.0	10.5	1.5
AUG							
12...	0945	1.1	190	8.40	--	10.0	6.0
26...	1010	1.4	240	8.40	--	9.0	2.0
SEP							
09...	1510	2.0	227	8.40	--	8.0	4.5
25...	0904	3.0	211	8.00	--	2.0	3.6

DATE	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JUN							
11...	768	11.5	95	38	78	13	0.03
25...	769	9.8	90	39	80	18	0.03
JUL							
15...	765	10.2	92	200	150	6	0.02
29...	766	10.4	93	1000	210	7	0.02
AUG							
12...	758	11.1	99	870	2600	14	0.04
26...	754	11.3	99	310	>10000	7	0.03
SEP							
09...	764	11.8	99	560	2800	18	0.10
25...	760	13.6	99	K140	6300	17	0.14

K NON-IDEAL COLONY COUNT

15274535 L CAMPBELL C BL 76TH AVE AT ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
APR												
23...	1330	2.0	270	7.90	--	1.5	68	759	11.6	83	K24	K80
24...	1345	2.3	279	8.00	--	3.0	67	758	11.0	82	K220	2100
JUN												
04...	1520	1.7	236	8.30	12.0	8.0	--	762	11.4	96	K6	K21
11...	1420	1.3	246	8.40	--	11.5	2.0	771	10.6	96	K3	K8
17...	0945	1.2	261	8.30	--	11.5	3.0	756	10.0	93	150	240
26...	1140	0.86	258	8.50	15.0	10.0	1.5	770	11.4	100	36	65
JUL												
15...	1153	1.0	261	8.30	--	12.5	2.5	767	10.6	99	73	140
29...	1200	0.84	274	8.40	--	12.0	2.5	767	10.9	101	370	160
AUG												
12...	1245	1.4	265	8.00	--	10.0	27	762	10.4	92	670	>3300
13...	0905	6.3	256	7.90	--	8.5	110	765	9.8	83	>2000	>3300
26...	1250	1.8	282	8.00	--	9.0	30	756	10.1	88	240	5400
SEP												
08...	1010	2.7	268	7.90	--	8.0	6.5	749	11.2	96	580	K1400
20...	0600	2.3	--	--	--	--	--	--	--	--	550	--
20...	0900	2.1	--	--	--	--	--	--	--	--	1400	--
20...	0930	2.0	269	8.00	--	8.5	--	755	11.0	95	--	--
20...	1100	2.1	--	--	--	--	--	--	--	--	570	--
20...	1216	2.1	269	8.10	--	9.0	--	756	11.5	100	--	--
20...	1300	2.2	--	--	--	--	--	--	--	--	670	--
20...	1423	2.2	268	8.20	--	9.5	--	756	11.4	101	--	--
22...	1600	4.1	--	--	--	--	--	--	--	--	410	--
22...	1645	5.2	255	7.50	--	8.5	--	749	10.6	92	--	--
22...	1835	6.2	222	7.60	--	8.5	--	749	10.3	90	--	--
22...	1900	6.2	--	--	--	--	--	--	--	--	2000	--
22...	2140	6.9	208	7.30	--	8.0	--	749	10.3	89	--	--
22...	2200	6.5	--	--	--	--	--	--	--	--	K1100	--
23...	0600	6.4	--	--	--	--	--	--	--	--	930	--
23...	0710	6.3	247	7.30	--	6.0	--	757	11.2	91	--	--
25...	1041	3.6	248	8.00	--	2.0	4.5	762	13.2	95	K93	1100

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	HARD-NESS (MG/L AS CACO3) (00900)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)
APR											
23...	1330	2.0	96	25	78	73	89	0	162	80	1.17
24...	1345	2.3	96	26	75	71	86	0	171	144	1.07
JUN											
17...	0945	1.2	120	11	102	102	--	--	154	3	--
AUG											
13...	0805	--	--	--	--	--	--	--	--	--	--
SEP											
08...	1010	2.7	130	13	106	105	128	0	175	3	--
20...	0600	2.3	--	--	--	--	--	--	--	--	--
20...	0900	2.1	--	--	--	--	--	--	--	--	--
20...	1100	2.1	--	--	--	--	--	--	--	--	--
20...	1300	2.2	--	--	--	--	--	--	--	--	--
22...	1600	4.1	--	--	--	--	--	--	--	--	--
22...	1900	6.2	--	--	--	--	--	--	--	--	--
22...	2200	6.5	--	--	--	--	--	--	--	--	--
23...	0600	6.4	--	--	--	--	--	--	--	--	--

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

15274535 L CAMPBELL C BL 76TH AVE AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	ANTI-MONY, TOTAL (UG/L AS SB) (01097)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
APR										
23...	0.030	1.20	0.040	1	2	<10	<1	14	21	5600
24...	0.030	1.10	0.060	1	4	<10	<1	13	28	8800
JUN										
17...	<0.010	1.00	0.010	<1	1	<10	<1	20	2	270
AUG										
13...	--	--	--	--	--	--	--	--	--	7500
SEP										
08...	<0.010	0.700	0.020	<1	1	<10	<1	11	2	660
20...	--	--	--	--	--	--	--	--	--	3200
20...	--	--	--	--	--	--	--	--	--	2000
20...	--	--	--	--	--	--	--	--	--	1100
20...	--	--	--	--	--	--	--	--	--	1400
22...	--	--	--	--	--	--	--	--	--	5700
22...	--	--	--	--	--	--	--	--	--	14000
22...	--	--	--	--	--	--	--	--	--	11000
23...	--	--	--	--	--	--	--	--	--	3500

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	THAL-LIUM, TOTAL (UG/L AS TL) (01059)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
APR										
23...	13	<0.10	6	<1	<1	<1	100	12	<0.010	<1
24...	17	<0.10	13	<1	<1	<1	120	19	<0.010	<1
JUN										
17...	<5	<0.10	1	<1	<1	<1	20	3.8	<0.010	<1
AUG										
13...	12	--	--	--	--	--	80	--	--	--
SEP										
08...	<5	<0.10	4	<1	<1	<1	40	6.7	<0.010	<1
20...	9	--	--	--	--	--	340	--	--	--
20...	<5	--	--	--	--	--	200	--	--	--
20...	<5	--	--	--	--	--	180	--	--	--
20...	<5	--	--	--	--	--	280	--	--	--
22...	17	--	--	--	--	--	350	--	--	--
22...	22	--	--	--	--	--	270	--	--	--
22...	17	--	--	--	--	--	250	--	--	--
23...	<5	--	--	--	--	--	170	--	--	--

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
APR					
23...	1330	2.0	170	0.92	--
24...	1345	2.3	245	1.5	--
JUN					
11...	1420	1.3	5	0.02	--
17...	0945	1.2	13	0.04	--
26...	1140	0.86	5	0.01	--
JUL					
15...	1153	1.0	9	0.02	--
29...	1200	0.84	7	0.02	--
AUG					
12...	1245	1.4	33	0.12	96
13...	0905	6.3	241	4.1	92
26...	1250	1.8	24	0.12	--
SEP					
08...	1010	2.7	13	0.09	94
19...	1545	1.7	28	0.13	--
20...	0901	2.1	33	0.19	93
22...	1425	2.9	23	0.18	--
22...	2001	6.4	306	5.3	95
22...	2201	6.5	217	3.8	94
23...	0015	12	366	12	--
23...	1205	6.2	112	1.9	--
23...	1545	6.3	94	1.6	--
25...	1041	3.6	17	0.17	--

SOUTH-CENTRAL ALASKA--Continued

15274540 NF L CAMPBELL C BL LK OTIS PKWY AT ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)
JUN							
05...	1400	0.39	247	7.50	12.5	7.5	7.0
11...	1240	0.28	262	7.70	--	11.5	5.0
26...	0945	0.15	267	7.90	14.0	9.0	5.0
JUL							
15...	1030	0.32	240	7.70	--	11.5	2.5
29...	1045	0.31	240	8.00	--	11.0	2.5
AUG							
12...	1030	0.94	215	7.80	--	9.5	4.5
26...	1045	0.98	237	7.80	--	8.0	2.0
SEP							
10...	0930	0.91	217	7.80	--	5.0	2.5
25...	0935	1.7	210	7.70	--	1.5	1.4

DATE	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JUN							
05...	758	9.9	83	68	K5	68	0.07
11...	769	10.0	91	K3	K5	5	0.00
26...	769	10.6	91	K2	35	5	0.00
JUL							
15...	765	9.6	88	110	91	4	0.00
29...	766	10.2	92	64	55	3	0.00
AUG							
12...	759	10.1	89	>600	>1000	7	0.02
26...	754	10.9	93	730	240	1	0.00
SEP							
10...	771	11.9	92	K160	K71	2	0.00
25...	761	12.5	89	91	120	2	0.01

15274543 NF L CAMPBELL C TR BL LK OTIS PY AT ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE, AIR (DEG C) (00020)	TEMPER-ATURE (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)
JUN							
05...	1445	0.24	312	7.60	--	7.5	4.0
11...	1140	0.21	325	8.10	--	12.0	9.0
26...	1030	0.37	349	7.80	15.0	7.0	550
JUL							
15...	1110	0.15	327	7.70	16.0	10.0	5.4
29...	1110	0.32	274	7.60	--	10.5	6.0
AUG							
12...	1110	0.40	271	7.50	--	10.0	16
26...	1125	0.40	353	7.60	--	9.5	8.0
SEP							
10...	1000	0.47	397	7.60	--	6.5	8.0
25...	0959	0.96	415	7.30	--	3.5	4.7

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

15274543 NF L CAMPBELL C TR BL LK OTIS PY AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)
JUN							
05...	758	11.0	92	K13	K23	9	0.01
11...	770	11.2	103	K26	110	21	0.01
26...	769	7.8	64	K42	230	1020	1.0
JUL							
15...	765	10.0	88	32	K11	7	0.00
29...	766	10.4	93	31	46	7	0.01
AUG							
12...	760	9.7	86	>600	>1000	13	0.01
26...	754	10.2	90	460	1200	7	0.01
SEP							
10...	770	11.7	94	380	430	9	0.01
25...	760	11.8	89	200	820	7	0.02

15274548 NF L CAMPBELL C BL OLD SEWARD HY AT ANCHORAGE AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	TUR-BID-ITY (NTU) (00076)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	STREP-TOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)
APR												
23...	1200	1.9	264	7.40	--	0.5	53	759	12.8	89	150	770
24...	1245	3.5	259	7.70	--	1.5	51	759	11.3	81	81	3500
JUN												
04...	1430	0.79	327	8.00	--	8.0	--	762	11.2	94	K12	K53
11...	1335	0.48	338	8.10	--	11.0	13	770	10.4	93	K1	K28
17...	1115	0.62	388	8.10	--	11.5	23	757	9.5	88	K60	50
26...	1235	0.45	349	7.90	16.0	10.5	12	772	10.3	91	K11	84
JUL												
15...	1225	0.48	315	7.80	18.0	12.0	7.3	767	9.4	87	52	85
29...	1310	0.64	303	7.90	--	12.0	7.5	767	9.9	91	34	40
AUG												
12...	1400	2.4	247	7.80	--	10.5	90	762	9.5	85	K1300	>3300
13...	1405	6.9	210	7.40	--	10.0	36	767	9.7	85	>6000	>3300
26...	1340	1.7	312	7.80	--	9.0	8.0	755	9.8	86	730	860
SEP												
08...	0910	4.3	283	7.40	--	8.0	12	748	10.4	90	K700	K1400
20...	0600	3.2	--	--	--	--	--	--	--	--	1600	--
20...	0900	2.8	--	--	--	--	--	--	--	--	730	--
20...	0955	2.6	344	7.80	--	8.5	--	755	10.4	90	--	--
20...	1100	2.6	--	--	--	--	--	--	--	--	830	--
20...	1231	2.6	343	7.80	--	9.0	--	756	10.6	92	--	--
20...	1300	2.3	--	--	--	--	--	--	--	--	870	--
20...	1410	2.3	344	7.80	--	9.5	--	756	10.5	93	--	--
22...	1600	5.0	--	--	--	--	--	--	--	--	1700	--
22...	1700	6.2	242	7.30	--	9.0	--	749	10.1	89	--	--
22...	1900	7.1	--	--	--	--	--	--	--	--	4800	--
22...	2040	8.1	206	7.40	--	8.5	--	750	9.8	85	--	--
22...	2200	7.9	--	--	--	--	--	--	--	--	3900	--
22...	2225	7.9	217	7.50	--	8.5	--	751	8.1	70	--	--
23...	0700	6.7	--	--	--	--	--	--	--	--	1000	--
23...	0730	6.6	220	7.10	--	6.5	--	757	10.3	84	--	--
25...	1120	3.2	310	7.50	--	3.0	5.3	763	12.2	91	200	290

K NON-IDEAL COLONY COUNT

SOUTH-CENTRAL ALASKA--Continued

15274548 NF L CAMPBELL C BL OLD SEWARD HY AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	HARD-NESS (MG/L AS CACO3) (00900)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	SOLIDS, RESIDUE AT 180 DEG. C DIS-SOLVED (MG/L) (70300)	SOLIDS, RESIDUE AT 105 DEG. C, SUS-PENDED (MG/L) (00530)	NITRO-GEN, NITRATE TOTAL (MG/L AS N) (00620)
APR											
23...	1200	1.9	94	25	64	60	73	0	170	52	0.270
24...	1245	3.5	82	25	59	56	68	0	165	96	0.270
JUN											
17...	1115	0.62	180	16	134	132	161	0	248	50	--
AUG											
13...	1405	6.9	--	--	--	--	--	--	--	--	--
SEP											
08...	0910	4.3	130	15	89	89	108	0	183	7	--
20...	0600	3.2	--	--	--	--	--	--	--	--	--
20...	0900	2.8	--	--	--	--	--	--	--	--	--
20...	1100	2.6	--	--	--	--	--	--	--	--	--
20...	1300	2.3	--	--	--	--	--	--	--	--	--
22...	1600	5.0	--	--	--	--	--	--	--	--	--
22...	1900	7.1	--	--	--	--	--	--	--	--	--
22...	2200	7.9	--	--	--	--	--	--	--	--	--
23...	0700	6.7	--	--	--	--	--	--	--	--	--

DATE	NITRO-GEN, NITRITE TOTAL (MG/L AS N) (00615)	NITRO-GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	PHOS-PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	ANTI-MONY, TOTAL (UG/L AS SB) (01097)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)
APR										
23...	0.030	0.300	0.040	<1	3	<10	<1	9	36	4400
24...	0.030	0.300	0.050	<1	3	<10	<1	10	25	7900
JUN										
17...	<0.010	0.100	<0.010	<1	2	<10	<1	16	4	3900
AUG										
13...	--	--	--	--	--	--	--	--	--	2500
SEP										
08...	<0.010	0.100	0.020	<1	1	<10	<1	13	3	1400
20...	--	--	--	--	--	--	--	--	--	3200
20...	--	--	--	--	--	--	--	--	--	2200
20...	--	--	--	--	--	--	--	--	--	1800
20...	--	--	--	--	--	--	--	--	--	1700
22...	--	--	--	--	--	--	--	--	--	12000
22...	--	--	--	--	--	--	--	--	--	8900
22...	--	--	--	--	--	--	--	--	--	5600
23...	--	--	--	--	--	--	--	--	--	2400

DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	THAL-LIUM, TOTAL (UG/L AS TL) (01059)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	CYANIDE TOTAL (MG/L AS CN) (00720)	OIL AND GREASE, TOTAL RECOV. GRAVI-METRIC (MG/L) (00556)
APR										
23...	44	<0.10	15	<1	<1	<1	200	16	<0.010	<1
24...	17	<0.10	8	<1	<1	<1	140	19	<0.010	<1
JUN										
17...	<5	<0.10	3	<1	<1	<1	230	7.7	<0.010	<1
AUG										
13...	<5	--	--	--	--	--	110	--	--	--
SEP										
08...	<5	<0.10	3	<1	<1	<1	130	8.8	<0.010	<1
20...	9	--	--	--	--	--	450	--	--	--
20...	<5	--	--	--	--	--	230	--	--	--
20...	<5	--	--	--	--	--	190	--	--	--
20...	<5	--	--	--	--	--	230	--	--	--
22...	42	--	--	--	--	--	430	--	--	--
22...	31	--	--	--	--	--	320	--	--	--
22...	14	--	--	--	--	--	300	--	--	--
23...	<5	--	--	--	--	--	270	--	--	--

SOUTH-CENTRAL ALASKA--Continued

15274548 NF L CAMPBELL C BL OLD SEWARD HY AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
APR					
23...	1200	1.9	102	0.52	--
24...	1245	3.5	186	1.8	--
JUN					
11...	1335	0.48	17	0.02	--
17...	1115	0.62	62	0.10	--
26...	1235	0.45	7	0.01	--
JUL					
15...	1225	0.48	7	0.01	--
29...	1310	0.64	13	0.02	--
AUG					
12...	1400	2.4	308	2.0	99
13...	1405	6.9	36	0.67	91
26...	1340	1.7	23	0.11	--
SEP					
08...	0910	4.3	15	0.17	87
19...	1533	2.4	115	0.75	--
20...	1001	2.6	23	0.16	93
20...	1301	2.3	18	0.11	90
22...	1430	2.4	28	0.18	--
22...	1701	6.2	222	3.7	96
22...	2101	8.1	165	3.6	90
23...	0020	15	519	21	90
23...	1217	6.0	28	0.45	--
23...	1555	5.7	20	0.31	--
25...	1120	3.2	11	0.09	--

15274602 CAMPBELL CR AB SEWER OUTFALL NR SPENARD AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAR						
13...	1730	14	--	21	0.79	77
JUL						
16...	0855	77	9.5	16	3.3	67

15274606 CAMPBELL CR BL SEWER OUTFALL NR SPENARD AK

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	TEMPER-ATURE AIR (DEG C) (00020)	TEMPER-ATURE WATER (DEG C) (00010)	SEDI-MENT, SUS-PENDED (MG/L) (80154)	SEDI-MENT, DIS-CHARGE, SUS-PENDED (T/DAY) (80155)	SED. SUSP. SIEVE DIAM. % FINER THAN .062 MM (70331)
MAY							
23...	1130	62	--	5.5	41	6.9	86
29...	0940	82	--	5.5	32	7.1	76
30...	0955	97	17.5	6.0	80	21	62
JUN							
04...	1900	69	--	7.0	18	3.4	83
16...	0910	123	--	10.0	124	41	61
JUL							
10...	1310	62	--	11.0	6	1.0	84
11...	1315	62	--	12.5	5	0.84	83
12...	1230	69	--	--	24	4.5	85
16...	0830	76	--	9.5	19	3.9	73
20...	1715	124	--	--	341	114	68
23...	1135	199	--	--	549	295	40
AUG							
30...	1125	101	--	--	10	2.7	60
SEP							
02...	1135	108	--	--	20	5.8	77
18...	1250	87	--	7.5	7	1.6	74
20...	2250	264	--	--	290	207	51

SOUTH-CENTRAL ALASKA--Continued

611220149503600 NF CHESTER C BL 15TH AVE AT ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	STREAM-FLOW, INSTAN-TANEOUS (CFS) (00061)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE WATER (DEG C) (00010)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)
DEC 02...	1200	1.0	430	--	--	190	68	53	15	15	2.6
AUG 27...	1230	2.2	180	5.70	10.5	80	20	23	5.4	8.3	2.0

DATE	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
DEC 02...	126	126	154	0	25	45	<0.10	17	250	1.90	<0.010
AUG 27...	59	60	73	0	14	19	0.10	7.3	120	0.650	<0.010

DATE	ANTI-MONY, TOTAL (UG/L AS SB) (01097)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE) (01044)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)
DEC 02...	<1	<1	<10	<1	8	4	5300	0	5800	<1
AUG 27...	1	3	--	1	24	23	11000	--	1300	60

DATE	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN) (01054)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	THAL-LIUM, TOTAL (UG/L AS TL) (01059)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)
DEC 02...	270	30	240	0.10	1	<1	<1	<1	50	<0.010
AUG 27...	350	--	170	0.10	18	--	--	--	210	--

DATE	TIME	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACE-NAPHTH-YLENE TOTAL (UG/L) (34200)	ACE-NAPHTH-ENE TOTAL (UG/L) (34205)
DEC 02...	1200	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	5.0	<3.0	<5.0	<5.0
AUG 27...	1230	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--	--

DATE	ANTHRA-CENE TOTAL (UG/L) (34220)	BENZO B FLUOR-AN-THENE TOTAL (UG/L) (34230)	BENZO K FLUOR-AN-THENE TOTAL (UG/L) (34242)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	BIS 2-CHLORO-ETHYL ETHER TOTAL (UG/L) (34273)	BIS (2-CHLORO-ETHOXY) METHANE TOTAL (UG/L) (34278)	BIS (2-CHLORO-ISO-PROPYL) ETHER TOTAL (UG/L) (34283)	N-BUTYL BENZYL PHTHAL-ATE TOTAL (UG/L) (34292)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	CHRY-SENE TOTAL (UG/L) (34320)
DEC 02...	<5.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0	<3.0	<3.0	<10.0
AUG 27...	--	--	--	--	--	--	--	--	<0.20	<0.20	--

SOUTH-CENTRAL ALASKA--Continued

611220149503600 NF CHESTER C BL 15TH AVE AT ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	DIETHYL PHTHALATE TOTAL (UG/L) (34336)	DIMETHYL PHTHALATE TOTAL (UG/L) (34341)	ETHYLBENZENE TOTAL (UG/L) (34371)	FLUORANTHENE TOTAL (UG/L) (34376)	FLUORENE TOTAL (UG/L) (34381)	HEXACHLOROCYCLOPENTADIENE TOTAL (UG/L) (34386)	HEXACHLOROETHANE TOTAL (UG/L) (34396)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L) (34403)	ISOPHORONE TOTAL (UG/L) (34408)	METHYLBROMIDE TOTAL (UG/L) (34413)	METHYLCHLORIDE TOTAL (UG/L) (34418)
DEC 02...	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	--
AUG 27...	--	--	<0.20	--	--	--	--	--	--	<0.20	<0.20

DATE	METHYLENE CHLORIDE TOTAL (UG/L) (34423)	N-NITROSODI-N-PROPYLAMINE TOTAL (UG/L) (34428)	N-NITROSODIPHENYLAMINE TOTAL (UG/L) (34433)	N-NITROSODIMETHYLAMINE TOTAL (UG/L) (34438)	NITROBENZENE TOTAL (UG/L) (34447)	PARACHLOROMETA CRESOL TOTAL (UG/L) (34452)	PHENANTHRENE TOTAL (UG/L) (34461)	PYRENE TOTAL (UG/L) (34469)	TETRACHLOROETHYLENE TOTAL (UG/L) (34475)	TRICHLOROFLUOROMETHANE TOTAL (UG/L) (34488)	1,1-DICHLOROETHANE TOTAL (UG/L) (34496)
DEC 02...	<3.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<3.0	<3.0	<3.0
AUG 27...	<2.0	--	--	--	--	--	--	--	0.20	<0.20	0.20

DATE	1,1-DICHLOROETHYLENE TOTAL (UG/L) (34501)	1,1,1-TRICHLOROETHANE TOTAL (UG/L) (34506)	1,1,2-TRICHLOROETHANE TOTAL (UG/L) (34511)	1,1,2,2 TETRACHLOROETHANE TOTAL (UG/L) (34516)	BENZOGHI PERYLENE1.12-BENZOPERYLFNE TOTAL (UG/L) (34521)	BENZO A ANTHRACENE1,2-BENZANTHRACENE TOTAL (UG/L) (34526)	1,2-DICHLOROBENZENE TOTAL (UG/L) (34536)	1,2-DICHLOROPROPANE TOTAL (UG/L) (34541)	1,2-TRANSDICHLOROETHYLENE TOTAL (UG/L) (34546)	1,2,4-TRICHLOROBENZENE TOTAL (UG/L) (34551)	1,2,5,6-DIBENZ-ANTHRA-CENE TOTAL (UG/L) (34556)
DEC 02...	<3.0	<3.0	<3.0	<3.0	<10.0	<5.0	<5.0	<3.0	<3.0	<5.0	<10.0
AUG 27...	<0.20	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	--	--

DATE	1,3-DICHLOROPROPANE TOTAL (UG/L) (34561)	1,3-DICHLOROBENZENE TOTAL (UG/L) (34566)	1,4-DICHLOROBENZENE TOTAL (UG/L) (34571)	2-CHLOROETHYLVINYLETHER TOTAL (UG/L) (34576)	2-CHLORONAPHTHALENE TOTAL (UG/L) (34581)	2-CHLOROPHENOL TOTAL (UG/L) (34586)	2-NITROPHENOL TOTAL (UG/L) (34591)	DI-N-OCTYL PHTHALATE TOTAL (UG/L) (34596)	2,4-DICHLOROPHENOL TOTAL (UG/L) (34601)	2,4-DIMETHYLPHENOL TOTAL (UG/L) (34606)	2,4-DINITROTOLUENE TOTAL (UG/L) (34611)
DEC 02...	<3.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
AUG 27...	<0.20	<0.20	<0.20	<0.20	--	--	--	--	--	--	--

DATE	2,4,-DINITROPHENOL TOTAL (UG/L) (34616)	2,4,6-TRICHLOROPHENOL TOTAL (UG/L) (34621)	2,6-DINITROTOLUENE TOTAL (UG/L) (34626)	4-BROMOPHENYL PHENYL ETHER TOTAL (UG/L) (34636)	4-CHLOROPHENYL PHENYL ETHER TOTAL (UG/L) (34641)	4-NITROPHENOL TOTAL (UG/L) (34646)	4,6-DINITRO-ORTHOCRESOL TOTAL (UG/L) (34657)	DICHLORODIFLUOROMETHANE TOTAL (UG/L) (34668)	PHENOL (C6H5OH) TOTAL (UG/L) (34694)	NAPHTHALENE TOTAL (UG/L) (34696)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L) (34699)
DEC 02...	<20.0	<20.0	<5.0	<5.0	<5.0	<30.0	<30.0	<3.0	<5.0	<5.0	--
AUG 27...	--	--	--	--	--	--	--	0.50	--	--	<0.20

DATE	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L) (34704)	PENTACHLOROPHENOL TOTAL (UG/L) (39032)	1,2-DIBROMO ETHYLENE TOTAL (UG/L) (39082)	BIS(2-ETHYL HEXYL) PHTHALATE TOTAL (UG/L) (39100)	DI-N-BUTYL PHTHALATE TOTAL (UG/L) (39110)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRICHLOROETHYLENE TOTAL (UG/L) (39180)	HEXACHLOROBENZENE TOTAL (UG/L) (39700)	HEXACHLOROBUTADIENE TOTAL (UG/L) (39702)	STYRENE TOTAL (UG/L) (77128)
DEC 02...	--	<30.0	--	<5.0	<5.0	<3.0	<3.0	<5.0	<5.0	--
AUG 27...	<0.20	--	<0.2	--	--	0.20	0.2	--	--	<0.2

611254149491700 NF CHESTER C AT AIRPORT HTS RD NR ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
DEC 02...	1100	364	--	--	160	65	42	13	11	1.5	93
AUG 27...	1015	250	6.70	9.5	110	41	29	8.4	8.9	1.3	65

DATE	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)
DEC 02...	93	113	0	23	41	<0.10	16	200	2.00	<0.010
AUG 27...	66	80	0	19	25	0.10	12	140	1.30	<0.010

DATE	ANTIMONY, TOTAL (UG/L AS SB) (01097)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYLLIUM, TOTAL RECOVERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, SUSPENDED RECOVERABLE (UG/L AS FE) (01044)	IRON, DISSOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)
DEC 02...	<1	<1	<10	<1	8	1	510	140	370	<1
AUG 27...	<1	2	--	<1	14	10	3900	--	160	<5

DATE	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, SUSPENDED RECOV. (UG/L AS MN) (01054)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOVERABLE (UG/L AS NI) (01067)	SELENIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	THALLIUM, TOTAL (UG/L AS TL) (01059)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	CYANIDE TOTAL (MG/L AS CN) (00720)
DEC 02...	60	10	46	<0.10	1	<1	<1	<1	40	<0.010
AUG 27...	130	--	41	<0.10	6	--	--	--	140	--

DATE	TIME	DICHLOROBROMOMETHANE TOTAL (UG/L) (32101)	CARBONTETRACHLORIDE TOTAL (UG/L) (32102)	1,2-DICHLOROETHANE TOTAL (UG/L) (32103)	BROMOFORM TOTAL (UG/L) (32104)	CHLORODIBROMOMETHANE TOTAL (UG/L) (32105)	CHLOROFORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACENAPHTHYLENE TOTAL (UG/L) (34200)	ACENAPHTHENE TOTAL (UG/L) (34205)
DEC 02...	1100	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<5.0
AUG 27...	1015	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--	--

DATE	ANTHRACENE TOTAL (UG/L) (34220)	BENZO B FLUORANTHENE TOTAL (UG/L) (34230)	BENZO K FLUORANTHENE TOTAL (UG/L) (34242)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	BIS 2-CHLOROETHYL ETHER TOTAL (UG/L) (34273)	BIS (2-CHLOROETHOXY) METHANE TOTAL (UG/L) (34278)	BIS (2-CHLOROISOPROPYL) ETHER TOTAL (UG/L) (34283)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L) (34292)	CHLOROBENZENE TOTAL (UG/L) (34301)	CHLOROETHANE TOTAL (UG/L) (34311)	CHRYSENE TOTAL (UG/L) (34320)
DEC 02...	<5.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0	<3.0	<3.0	<10.0
AUG 27...	--	--	--	--	--	--	--	--	<0.20	<0.20	--

611254149491700 NF CHESTER C AT AIRPORT HTS RD NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	DIETHYL PHTHALATE TOTAL (UG/L) (34336)	DIMETHYL PHTHALATE TOTAL (UG/L) (34341)	ETHYLBENZENE TOTAL (UG/L) (34371)	FLUORANTHENE TOTAL (UG/L) (34376)	FLUORENE TOTAL (UG/L) (34381)	HEXACHLOROCYCLOPENTADIENE TOTAL (UG/L) (34386)	HEXACHLOROETHANE TOTAL (UG/L) (34396)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L) (34403)	ISOPHORONE TOTAL (UG/L) (34408)	METHYLBROMIDE TOTAL (UG/L) (34413)	METHYLCHLORIDE TOTAL (UG/L) (34418)
DEC 02...	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0	<5.0	<10.0	<5.0	<3.0	--
AUG 27...	--	--	<0.20	--	--	--	--	--	--	<0.20	<0.20

DATE	METHYLENE CHLORIDE TOTAL (UG/L) (34423)	N-NITROSODI-N-PROPYLAMINE TOTAL (UG/L) (34428)	N-NITRO-SODIPHENYLAMINE TOTAL (UG/L) (34433)	N-NITRO-SODIMETHYLAMINE TOTAL (UG/L) (34438)	NITROBENZENE TOTAL (UG/L) (34447)	PARACHLOROMETA CRESOL TOTAL (UG/L) (34452)	PHENANTHRENE TOTAL (UG/L) (34461)	PYRENE TOTAL (UG/L) (34469)	TETRACHLOROETHYLENE TOTAL (UG/L) (34475)	TRICHLOROFLUOROMETHANE TOTAL (UG/L) (34488)	1,1-DICHLOROETHANE TOTAL (UG/L) (34496)
DEC 02...	<3.0	<5.0	<5.0	<5.0	<5.0	<30.0	<5.0	<5.0	<3.0	<3.0	<3.0
AUG 27...	<1.0	--	--	--	--	--	--	--	<0.20	<0.20	<0.20

DATE	1,1-DICHLOROETHYLENE TOTAL (UG/L) (34501)	1,1,1-TRICHLOROETHANE TOTAL (UG/L) (34506)	1,1,2-TRICHLOROETHANE TOTAL (UG/L) (34511)	1,1,2,2 TETRACHLOROETHANE TOTAL (UG/L) (34516)	BENZOGHI PERYLENE1,12-BENZOPERYLENE TOTAL (UG/L) (34521)	BENZO A ANTHRACENE1,2-BENZANTHRACENE TOTAL (UG/L) (34526)	1,2-DICHLOROBENZENE TOTAL (UG/L) (34536)	1,2-DICHLOROPROPANE TOTAL (UG/L) (34541)	1,2-TRANSDICHLOROETHYLENE TOTAL (UG/L) (34546)	1,2,4-TRICHLOROBENZENE TOTAL (UG/L) (34551)	1,2,5,6-DIBENZ-ANTHRACENE TOTAL (UG/L) (34556)
DEC 02...	<3.0	<3.0	<3.0	<3.0	<10.0	<5.0	<5.0	<3.0	<3.0	<5.0	<10.0
AUG 27...	<0.20	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	--	--

DATE	1,3-DICHLOROPROPANE TOTAL (UG/L) (34561)	1,3-DICHLOROBENZENE TOTAL (UG/L) (34566)	1,4-DICHLOROBENZENE TOTAL (UG/L) (34571)	2-CHLOROETHYLVINYLETHER TOTAL (UG/L) (34576)	2-CHLORONAPHTHALENE TOTAL (UG/L) (34581)	2-CHLOROPHENOL TOTAL (UG/L) (34586)	2-NITROPHENOL TOTAL (UG/L) (34591)	DI-N-OCTYL PHTHALATE TOTAL (UG/L) (34596)	2,4-DICHLOROPHENOL TOTAL (UG/L) (34601)	2,4-DIMETHYLPHENOL TOTAL (UG/L) (34606)	2,4-DINITROTOLUENE TOTAL (UG/L) (34611)
DEC 02...	<3.0	<5.0	<5.0	<3.0	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0
AUG 27...	<0.20	<0.20	<0.20	<0.20	--	--	--	--	--	--	--

DATE	2,4,-DINITROPHENOL TOTAL (UG/L) (34616)	2,4,6-TRICHLOROPHENOL TOTAL (UG/L) (34621)	2,6-DINITROTOLUENE TOTAL (UG/L) (34626)	4-BROMOPHENYL PHENYL ETHER TOTAL (UG/L) (34636)	4-CHLOROPHENYL PHENYL ETHER TOTAL (UG/L) (34641)	4-NITROPHENOL TOTAL (UG/L) (34646)	4,6-DINITRO-ORTHOCRESOL TOTAL (UG/L) (34657)	DICHLORODIFLUOROMETHANE TOTAL (UG/L) (34668)	PHENOL (C6H5OH) TOTAL (UG/L) (34694)	NAPHTHALENE TOTAL (UG/L) (34696)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L) (34699)
DEC 02...	<20.0	<20.0	<5.0	<5.0	<5.0	<30.0	<30.0	<3.0	<5.0	<5.0	--
AUG 27...	--	--	--	--	--	--	--	0.40	--	--	<0.20

DATE	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L) (34704)	PENTACHLOROPHENOL TOTAL (UG/L) (39032)	1,2-DIBROMOETHYLENE TOTAL (UG/L) (39082)	BIS(2-ETHYLHEXYL) PHTHALATE TOTAL (UG/L) (39100)	DI-N-BUTYL PHTHALATE TOTAL (UG/L) (39110)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRICHLOROETHYLENE TOTAL (UG/L) (39180)	HEXACHLOROBENZENE TOTAL (UG/L) (39700)	HEXACHLOROBUTADIENE TOTAL (UG/L) (39702)	STYRENE TOTAL (UG/L) (77128)
DEC 02...	--	<30.0	--	<5.0	<5.0	<3.0	<3.0	<5.0	<5.0	--
AUG 27...	<0.20	--	<0.2	--	--	<0.20	<0.2	--	--	<0.2

YUKON ALASKA

640114145451800 - DELTA R AB JARVIS C NR FT GREELEY AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLE LOCATION, CROSS SECTION (FT FM L BANK) (00009)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
SEP								
09...	1845	115	212	8.00	6.5	735	11.6	97
09...	1846	210	213	8.00	6.0	735	--	--
09...	1847	270	213	8.00	6.0	735	11.6	97
09...	1848	310	213	8.10	6.0	735	11.6	97
09...	1849	350	213	8.10	6.0	735	11.5	96

DATE	TIME	STREAM WIDTH (FT) (00004)	STREAMFLOW, INSTANTANEOUS (CFS) (00061)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)
SEP												
09...	1900	420	3960	5	110	13	K2	K7	110	39	29	8.1

DATE	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)
SEP												
09...	2.8	2.6	67	67	81	0	41	1.1	<0.10	4.0	130	<0.100

DATE	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)	BARIUM, RECOV. FM BOTTOM MATERIAL (UG/G AS BA) (01008)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, TOTAL RECOVERABLE (UG/L AS CR) (01034)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)
SEP												
09...	0.010	7	21	100	90	<1	<1	30	10	10	28	10

DATE	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) (01068)
SEP											
09...	18000	24	6600	6	<10	340	5	280	<0.10	0.03	20

DATE	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	SEDIMENT, SUSPENDED (MG/L) (80154)	SEDIMENT, DISCHARGE, SUSPENDED (T/DAY) (80155)	SED. SUSP. FALL DIAM. % FINER THAN .002 MM (70337)	SED. SUSP. FALL DIAM. % FINER THAN .004 MM (70338)	SED. SUSP. FALL DIAM. % FINER THAN .008 MM (70339)	SED. SUSP. FALL DIAM. % FINER THAN .016 MM (70340)	SED. SUSP. FALL DIAM. % FINER THAN .031 MM (70341)	SED. SUSP. FALL DIAM. % FINER THAN .062 MM (70342)
SEP											
09...	<1	60	40	1080	11500	8	11	15	21	26	36

DATE	SED. SUSP. FALL DIAM. % FINER THAN .125 MM (70343)	SED. SUSP. FALL DIAM. % FINER THAN .250 MM (70344)	SED. SUSP. FALL DIAM. % FINER THAN .500 MM (70345)	SED. SUSP. FALL DIAM. % FINER THAN 1.00 MM (70346)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	TANNIN AND LIGNIN (MG/L) (32240)
SEP											
09...	52	85	99	100	0.8	8.4	2.9	7.7	2.3	6.6	<1.0

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS SITES

YUKON ALASKA--Continued

640114145451800 - DELTA R AB JARVIS C NR FT GREELEY AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROMO-FORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACE-NAPHTH-YLENE TOTAL (UG/L) (34200)	ACE-NAPHTH-YLENE BOT.MAT (UG/KG) (34203)	ACE-NAPHTH-ENE TOTAL (UG/L) (34205)
SEP 09...	1900	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 5.0	< 200	< 5.0

DATE	ACE-NAPHTH-ENE BOT.MAT (UG/KG) (34208)	ANTHRA-CENE TOTAL (UG/L) (34220)	ANTHRA-CENE BOT.MAT (UG/KG) (34223)	BENZO B FLUOR-AN-THENE TOTAL (UG/L) (34230)	BENZO B FLUOR-AN-THENE BOT.MAT (UG/KG) (34233)	BENZO K FLUOR-AN-THENE TOTAL (UG/L) (34242)	BENZO K FLUOR-AN-THENE BOT.MAT (UG/KG) (34245)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	BENZO-A-PYRENE BOT.MAT (UG/KG) (34250)	BIS 2-CHLORO-ETHYL ETHER TOTAL (UG/L) (34273)	BIS (2-CHLORO-ETHYL) ETHER BOT.MAT (UG/KG) (34276)	BIS (2-CHLORO-ETHOXY) METHANE TOTAL (UG/L) (34278)
SEP 09...	< 200	< 5.0	< 200	< 10.0	< 400	< 10.0	< 400	< 10.0	< 400	< 5.0	< 200	< 5.0

DATE	BIS (2-CHLORO-ETHOXY) METHANE BOT.MAT (UG/KG) (34281)	BIS (2-CHLORO-ISO-PROPYL) ETHER TOTAL (UG/L) (34283)	BIS (2-CHLORO-ISO-PROPYL) ETHER BOT.MAT (UG/KG) (34286)	N-BUTYL BENZYL PHTHAL-ATE TOTAL (UG/L) (34292)	N-BUTYL BENZYL PHTHAL-ATE BOT.MAT (UG/KG) (34295)	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	CHRY-SENE TOTAL (UG/L) (34320)	CHRY-SENE BOT.MAT (UG/KG) (34323)	DIETHYL PHTHAL-ATE TOTAL (UG/L) (34336)	DIETHYL PHTHAL-ATE BOT.MAT (UG/KG) (34339)	DI-METHYL PHTHAL-ATE TOTAL (UG/L) (34341)
SEP 09...	< 200	< 5.0	< 200	< 5.0	< 200	< 3.0	< 3.0	< 10.0	< 400	< 5.0	< 200	< 5.0

DATE	DI-METHYL PHTHAL-ATE BOT.MAT (UG/KG) (34344)	ETHYL-BENZENE TOTAL (UG/L) (34371)	FLUOR-ANTHENE TOTAL (UG/L) (34376)	FLUOR-ANTHENE BOT.MAT (UG/KG) (34379)	FLUOR-ENE TOTAL (UG/L) (34381)	FLUOR-ENE BOT.MAT (UG/L) (34384)	HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L) (34386)	HEXA-CHLORO-CYCLO-PENT-ADIENE BOT.MAT (UG/KG) (34389)	HEXA-CHLORO-ETHANE TOTAL (UG/L) (34396)	HEXA-CHLORO-ETHANE BOT.MAT (UG/KG) (34399)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L) (34403)	INDENO (1,2,3-CD) PYRENE BOT.MAT (UG/KG) (34406)
SEP 09...	< 200	< 3.0	< 5.0	< 200	< 5.0	< 200	< 5.0	< 200	< 5.0	< 200	< 10.0	< 200

DATE	ISO-PHORONE TOTAL (UG/L) (34408)	ISO-PHORONE BOT.MAT (UG/KG) (34411)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL-CHLO-RIDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	N-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L) (34428)	N-NITRO-SODI-N-PROPYL-AMINE BOT.MAT (UG/KG) (34431)	N-NITRO-SODI-PHENY-LAMINE TOTAL (UG/L) (34433)	N-NITRO-SODI-PHENY-LAMINE BOT.MAT (UG/KG) (34436)	N-NITRO-SODI-METHY-LAMINE TOTAL (UG/L) (34438)	N-NITRO-SODI-METHY-LAMINE BOT.MAT (UG/KG) (34441)	NAPHTH-ALENE BOT.MAT (UG/KG) 34445)
SEP 09...	< 5.0	< 200	< 3.0	< 3.0	< 3.0	< 5.0	< 200	< 5.0	< 200	< 5.0	< 200	< 200

DATE	NITRO-BENZENE TOTAL (UG/L) (34447)	NITRO-BENZENE BOT.MAT (UG/KG) (34450)	PARA-CHLORO-META CRESOL TOTAL (UG/L) (34452)	PARA-CHLORO-META CRESOL BOT.MAT (UG/KG) (34455)	PHENAN-THRENE TOTAL (UG/L) (34461)	PHENAN-THRENE BOT.MAT (UG/KG) (34464)	PYRENE TOTAL (UG/L) (34469)	PYRENE BOT.MAT (UG/KG) (34472)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)
SEP 09...	< 5.0	< 200	< 5.0	< 600	< 5.0	< 200	< 5.0	< 200	< 3.0	< 3.0	< 3.0	< 3.0

DATE	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	1,1,2,2 TETRA-CHLORO-ETHANE TOTAL (UG/L) (34516)	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE TOTAL (UG/L) (34521)	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE BOT.MAT (UG/KG) (34524)	BENZO A ANTHRAC ENE1,2-BENZANT HRACENE TOTAL (UG/L) (34526)	BENZO A ANTHRAC ENE1,2-BENZANT HRACENE BOT.MAT (UG/KG) (34529)	1,2-DI-CHLORO-BENZENE TOTAL (UG/L) (34536)	1,2-DI-CHLORO-BENZENE BOT.MAT (UG/KG) (34539)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	1,2-TRANSDI CHLORO-ETHYL-ENE TOTAL (UG/L) (34546)	1,2,4-TRI-CHLORO-BENZENE TOTAL (UG/L) (34551)
SEP 09...	< 3.0	< 3.0	< 3.0	< 10.0	< 400	< 10.0	< 200	< 3.0	< 200	< 3.0	< 3.0	< 5.0

DATE	1,2,4-TRI-CHLORO-BENZENE BOT.MAT (UG/KG) (34554)	1,2,5,6 -DIBENZ -ANTHRA -CENE TOTAL (UG/L) (34556)	1,2,5,6 -DIBENZ -ANTHRA -CENE BOT.MAT (UG/KG) (34559)	1,3-DI-CHLORO-PROPANE TOTAL (UG/L) (34561)	1,3-DI-CHLORO-BENZENE TOTAL (UG/L) (34566)	1,3-DI-CHLORO-BENZENE BOT.MAT (UG/KG) (34569)	1,4-DI-CHLORO-BENZENE TOTAL (UG/L) (34571)	1,4-DI-CHLORO-BENZENE BOT.MAT (UG/KG) (34574)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L) (34576)	2-CHLORO-NAPH-THALENE TOTAL (UG/L) (34581)	2-CHLORO-NAPH-THALENE BOT.MAT (UG/KG) (34584)	2-CHLORO-PHENOL TOTAL (UG/L) (34586)
SEP 09...	< 200	< 10.0	< 400	< 3.0	< 3.0	< 200	< 3.0	< 200	< 3.0	< 5.0	< 200	< 6.0

YUKON ALASKA--Continued

640114145451800 - DELTA R AB JARVIS C NR FT GREELEY AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	2-CHLOROPHENOL BOT.MAT (UG/KG) (34589)	2-NITROPHENOL TOTAL (UG/L) (34591)	2-NITROPHENOL BOT.MAT (UG/KG) (34594)	DI-N-OCTYL PHTHALATE TOTAL (UG/L) (34596)	DI-N-OCTYL PHTHALATE BOT.MAT (UG/KG) (34599)	2,4-DICHLOROPHENOL TOTAL (UG/L) (34601)	2,4-DICHLOROPHENOL BOT.MAT (UG/KG) (34604)	2,4-DIMETHYLPHENOL TOTAL (UG/L) (34606)	2,4-DP, IN BOTTOM MAT. (UG/KG) (34609)	2,4-DINITROTOLUENE TOTAL (UG/L) (34611)	2,4-DINITROTOLUENE BOT.MAT (UG/KG) (34614)	2,4,-DINITROPHENOL TOTAL (UG/L) (34616)
SEP 09...	<200	<6.0	<200	<10.0	<400	<6.0	<200	<6.0	<200	<5.0	<200	<20.0

DATE	2,4-DINITROPHENOL BOT.MAT (UG/KG) (34619)	2,4,6-TRICHLOROPHENOL TOTAL (UG/L) (34621)	2,4,6-TRICHLOROPHENOL BOT.MAT (UG/KG) (34624)	2,6-DINITROTOLUENE TOTAL (UG/L) (34626)	2,6-DINITROTOLUENE BOT.MAT (UG/KG) (34629)	4-BROMOPHENYL PHENYL ETHER TOTAL (UG/L) (34636)	4-BROMOPHENYL PHENYL ETHER BOT.MAT (UG/KG) (34639)	4-CHLOROPHENYL PHENYL ETHER TOTAL (UG/L) (34641)	4-NITROPHENOL TOTAL (UG/L) (34646)	4-NITROPHENOL BOT.MAT (UG/KG) (34649)	4,6-DINITRO-ORTHO-CRESOL TOTAL (UG/L) (34657)	4,6-DINITRO-ORTHO-CRESOL BOT.MAT (UG/KG) (34660)
SEP 09...	<600	<5.0	<600	<5.0	<200	<5.0	<200	<200	<30.0	<600	<30.0	<600

DATE	DICHLORODIFLUOROMETHANE TOTAL (UG/L) (34668)	PHENOL (C6H5OH) TOTAL (UG/L) (34694)	PHENOL (C6H5OH) BOT.MAT (UG/KG) (34695)	NAPHTHALENE TOTAL (UG/L) (34696)	TRANS-1,3-DICHLOROPROPENE TOTAL (UG/L) (34699)	CIS 1,3-DICHLOROPROPENE TOTAL (UG/L) (34704)	DISYSTON TOTAL (UG/L) (39011)	PHORATE OTAL (UG/L) (39023)	PENTACHLOROPHENOL TOTAL (UG/L) (39032)	PERTHANE TOTAL (UG/L) (39034)	PENTACHLOROPHENOL BOT.MAT (UG/KG) (39061)	1,2-DIBROMO ETHYLENE TOTAL (UG/L) (39082)
SEP 09...	<3.0	<6.0	<200	<5.0	<3.0	<3.0	<0.01	<0.01	<30.0	<0.1	<600	<3.0

DATE	BIS(2-ETHYL HEXYL) PHTHALATE TOTAL (UG/L) (39100)	BIS(2-ETHYL HEXYL) PHTHALATE BOT.MAT (UG/KG((39102)	DI-N-BUTYL PHTHALATE TOTAL (UG/L) (39110)	DI-N-BUTYL PHTHALATE BOT.MAT (UG/KG) (39112)	VINYL CHLORIDE TOTAL (UG/L) (39175)	TRICHLOROETHYLENE TOTAL (UG/L) (39180)	NAPHTHALENES, POLYCHLOR. TOTAL (UG/L) (39250)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLORDANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)
SEP 09...	<5.0	<200	<5.0	<200	<3.0	<3.0	<0.10	<0.010	<0.010	<0.1	<0.010	<0.010

DATE	DDT, TOTAL (UG/L) (39370)	DIELDRIN TOTAL (UG/L) (39380)	ENDOSULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	TOXAPHENE, TOTAL (UG/L) (39400)	HEPTACHLOR, TOTAL (UG/L) (39410)	HEPTACHLOR EPOXIDE TOTAL (UG/L) (39420)	METHOXYCHLOR, TOTAL (UG/L) (39480)	PCB, TOTAL (UG/L) (39516)	MALATHION, TOTAL (UG/L) (39530)	PARATHION, TOTAL (UG/L) (39540)
SEP 09...	<0.010	<0.010	<0.010	<0.010	<0.01	<1	<0.010	<0.010	<0.01	<0.1	<0.01	<0.01

DATE	DIAZINON, TOTAL (UG/L) (39570)	METHYL PARATHION, TOTAL (UG/L) (39600)	HEXACHLOROBENZENE TOTAL (UG/L) (39700)	HEXACHLOROBENZENE TOT. IN BOTTOM MATL. (UG/KG) (39701)	HEXACHLOROBUTADIENE TOTAL (UG/L) (39702)	HEXACHLOROBUTADIENE BOT.MAT (UG/KG) (39705)	MIREX, TOTAL (UG/L) (39755)	TOTAL TRITHION (UG/L) (39786)	METHYL TRITHION, TOTAL (UG/L) (39790)	STYRENE TOTAL (UG/L) (77128)	TNT TOTAL (UG/L) (81360)	RDX TOTAL (UG/L) (81364)
SEP 09...	<0.01	<0.01	<5.0	<200	<5.0	<200	<0.01	<0.01	<0.01	<3.0	<2.0	<2.0

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ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA

612147150091400 - HORSESHOE LK W ARM PT MACKENZIE NR ANCHORAGE AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLING DEPTH (M) (00098)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	CHLOROPHYLL A FLUOROMETRIC METHOD CORR. (UG/L) (32209)
OCT									
07...	1136	0.10	147	7.80	7.0	764	9.7	80	--
07...	1137	0.50	147	7.90	7.0	764	9.7	80	--
07...	1138	1.0	147	8.30	7.0	764	9.2	76	0.890
07...	1139	1.5	147	8.00	7.0	764	9.0	74	--
07...	1140	2.0	147	8.00	7.0	764	9.0	74	--
07...	1141	2.5	147	8.00	7.0	764	9.0	74	--
07...	1142	3.0	147	8.00	7.0	764	8.9	73	0.860
07...	1143	3.5	147	8.00	7.0	764	8.9	73	--
07...	1144	4.0	147	8.00	7.0	764	8.9	73	--
07...	1145	4.5	147	7.90	7.0	764	8.8	72	--
07...	1146	5.0	147	7.90	7.0	764	8.8	72	0.930
07...	1147	5.5	147	7.90	7.0	764	8.7	71	--
07...	1148	6.0	147	7.90	7.0	764	8.7	71	--
07...	1149	6.5	147	7.90	7.0	764	8.8	72	--
07...	1150	7.0	147	7.90	7.0	764	8.8	72	--
07...	1151	7.5	147	7.90	7.0	764	8.8	72	--
JAN									
21...	1205	0.10	180	7.60	1.0	750	9.2	65	--
21...	1206	0.50	176	7.60	1.5	750	8.8	64	--
21...	1207	1.0	176	7.60	2.0	750	8.8	64	0.760
21...	1208	1.5	174	7.60	2.5	750	8.4	62	--
21...	1209	2.0	175	7.60	2.5	750	8.2	61	--
21...	1210	2.5	176	7.60	3.0	750	7.4	56	--
21...	1211	3.0	177	7.60	3.0	750	6.7	50	--
21...	1212	3.5	177	7.50	3.0	750	6.2	47	--
21...	1213	4.0	179	7.50	3.0	750	5.0	38	--
21...	1214	4.5	182	7.40	3.0	750	4.3	33	--
21...	1215	5.0	183	7.40	3.5	750	4.0	30	--
21...	1216	5.5	179	7.20	--	--	0	--	--
21...	1217	6.0	185	7.10	--	--	0	--	--
21...	1218	6.5	191	7.10	--	--	0	--	--
21...	1219	7.0	194	7.10	--	--	0	--	--
MAY									
22...	1215	0.10	140	7.50	10.0	759	9.4	83	--
22...	1216	0.50	140	7.50	10.0	759	9.1	81	--
22...	1217	1.0	139	7.50	9.5	759	9.1	80	2.05
22...	1218	1.5	139	7.50	9.5	759	8.8	77	--
22...	1219	2.0	139	7.40	9.5	759	9.1	80	--
22...	1220	2.5	139	7.40	9.0	759	8.7	75	--
22...	1221	3.0	142	7.30	7.5	759	7.5	63	2.46
22...	1222	3.5	144	7.30	7.0	759	6.8	56	--
22...	1223	4.0	154	7.20	6.0	759	5.8	47	--
22...	1224	4.5	160	7.20	6.0	759	5.1	41	--
22...	1225	5.0	164	7.20	5.5	759	4.5	36	3.10
22...	1226	5.5	168	7.10	5.5	759	4.2	33	--
22...	1227	6.0	181	7.10	5.0	759	2.6	21	--
22...	1228	6.5	187	7.10	5.0	759	2.4	19	--
22...	1229	7.0	192	7.10	5.0	759	1.8	14	--
22...	1230	7.5	204	7.00	5.0	759	0.8	6	--
JUN									
13...	1039	0.50	147	7.90	16.5	761	11.2	114	--
13...	1040	1.0	147	8.00	16.0	761	10.9	111	--
13...	1041	1.5	147	8.00	16.0	761	10.7	109	--
13...	1042	2.0	147	8.10	16.0	761	10.7	109	--
13...	1043	2.5	147	8.10	16.0	761	10.6	108	--
13...	1044	3.0	147	8.10	16.0	761	10.6	107	2.06
13...	1045	3.5	148	8.10	15.5	761	10.8	109	--
13...	1046	4.0	149	7.90	15.0	761	9.9	98	--
13...	1047	4.5	150	7.80	14.0	761	9.6	93	--
13...	1048	5.0	161	7.40	10.5	761	7.5	67	1.89
13...	1049	5.5	166	7.30	8.0	761	5.8	49	--
13...	1050	6.0	176	7.20	7.0	761	3.3	27	--
13...	1051	6.5	185	7.20	6.5	761	0.6	5	--
13...	1052	7.0	190	7.10	6.0	761	0	0	--
13...	1053	7.5	200	7.10	6.0	761	0	0	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

612147150091400 - HORSESHOE LK W ARM PT MACKENZIE NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLING DEPTH (M) (00098)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	CHLOROPHYLL A FLUOROMETRIC METHOD CORR. (UG/L) (32209)
JUL									
03...	1100	0.10	135	8.30	18.5	762	10.5	112	--
03...	1101	0.50	135	8.30	18.5	762	10.2	109	--
03...	1102	1.0	135	8.30	18.5	762	10.0	107	1.58
03...	1103	1.5	136	8.30	18.5	762	10.0	107	--
03...	1104	2.0	136	8.30	18.5	762	9.9	106	--
03...	1105	2.5	136	8.30	18.5	762	9.8	105	--
03...	1106	3.0	136	8.30	18.5	762	9.8	105	1.54
03...	1107	3.5	137	8.30	18.5	762	9.6	102	--
03...	1108	4.0	138	8.10	18.0	762	9.5	101	--
03...	1109	4.5	138	8.20	17.5	762	9.4	99	--
03...	1110	5.0	142	7.60	16.0	762	8.4	85	1.70
03...	1111	5.5	153	7.20	11.5	762	5.2	48	--
03...	1112	6.0	162	7.10	9.5	762	2.7	24	--
03...	1113	6.5	170	7.10	8.0	762	0.8	7	--
03...	1114	7.0	170	7.10	7.5	762	0	0	--
03...	1115	7.5	184	7.10	7.0	762	0	0	--
03...	1116	7.7	188	7.10	6.5	762	0	0	--
30...	1103	0.10	153	8.00	18.0	767	10.2	107	--
30...	1104	0.50	153	8.10	18.0	767	10.4	109	--
30...	1105	1.0	153	8.10	18.0	767	9.8	103	1.27
30...	1106	1.5	153	8.10	18.0	767	9.8	103	--
30...	1107	2.0	153	8.10	18.0	767	9.6	101	--
30...	1108	2.5	153	8.10	18.0	767	9.4	99	--
30...	1109	3.0	153	8.10	18.0	767	9.4	99	1.27
30...	1110	3.5	153	8.10	18.0	767	9.3	98	--
30...	1111	4.0	153	8.00	18.0	767	8.8	92	--
30...	1112	4.5	154	7.90	17.5	767	8.6	89	--
30...	1113	5.0	154	7.70	17.0	767	8.3	86	1.40
30...	1114	5.5	166	7.40	15.0	767	5.4	53	--
30...	1115	6.0	179	7.00	12.5	767	2.9	27	--
30...	1116	6.5	188	7.00	11.0	767	0.2	2	--
30...	1117	7.0	194	7.00	9.5	767	0	0	--
30...	1118	7.5	203	7.00	8.5	767	0	0	--
30...	1119	7.8	220	7.00	8.0	767	0	0	--
AUG									
20...	0936	0.10	152	7.80	15.5	771	11.1	110	--
20...	0937	0.50	152	7.80	15.5	771	10.7	106	--
20...	0938	1.0	152	7.90	15.5	771	10.5	104	1.16
20...	0939	1.5	152	7.90	15.5	771	10.3	102	--
20...	0940	2.0	152	7.90	15.5	771	10.3	102	--
20...	0941	2.5	152	7.90	15.5	771	10.2	101	--
20...	0942	3.0	152	7.90	15.5	771	10.1	100	1.20
20...	0943	3.5	152	7.90	15.5	771	10.1	100	--
20...	0944	4.0	152	7.90	15.5	771	9.9	98	--
20...	0945	4.5	152	7.90	15.0	771	9.6	94	--
20...	0946	5.0	152	7.80	15.0	771	9.5	93	1.32
20...	0947	5.5	152	7.70	15.0	771	8.9	87	--
20...	0948	6.0	155	7.60	14.5	771	7.7	75	--
20...	0949	6.5	163	7.30	14.0	771	4.3	41	--
20...	0950	7.0	204	7.10	11.0	771	0.1	1	--
20...	0951	7.5	223	7.00	9.5	771	0	0	--
SEP									
10...	1043	0.10	136	7.60	13.0	771	11.3	106	--
10...	1044	0.50	136	7.60	13.0	771	11.0	103	--
10...	1045	1.0	136	7.60	13.0	771	10.8	102	1.12
10...	1046	1.5	136	7.60	13.0	771	10.4	98	--
10...	1047	2.0	137	7.60	13.0	771	10.1	95	--
10...	1048	2.5	137	7.60	13.0	771	10.1	95	--
10...	1049	3.0	138	7.60	13.0	771	9.8	92	1.11
10...	1050	3.5	138	7.60	13.0	771	9.9	93	--
10...	1051	4.0	138	7.60	13.0	771	9.8	92	--
10...	1052	4.5	138	7.70	13.0	771	9.7	91	--
10...	1053	5.0	138	7.70	13.0	771	9.7	91	1.07
10...	1054	5.5	139	7.70	13.0	771	9.7	91	--
10...	1055	6.0	139	7.70	13.0	771	9.6	90	--
10...	1056	6.5	139	7.70	13.0	771	9.5	88	--
10...	1057	7.0	139	7.70	13.0	771	9.7	91	--
10...	1058	7.5	139	7.70	13.0	771	9.7	91	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

612147150091400 - HORSESHOE LK W ALM PT MACKENZIE NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	TEMPERATURE, AIR (DEG C) (00020)	CLOUD COVER (PERCENT) (00032)	WIND SPEED (MILES PER HOUR) (00035)	WIND DIRECTION (DEG. FROM TRUE NORTH) (00036)	LIGHT INCID. 400-700NM INTENS. (U-EINS /SQM/S) (00200)	LIGHT, ATTENUATION COEFFICIENT (ALPHA/ METER) (70971)	TRANSPARENCY (SECCHI DISK) (M) (00078)	ICE THICKNESS METERS (82131)	SNOW DEPTH INCHES (82300)	LIGHT DEPTH TO 1 % OF SURFACE LIGHT METERS (85328)
OCT											
07...	1153	7.0	100	0	--	282	0.50	4.70	--	--	>7.5
JAN											
21...	1220	-6.5	100	10	0	--	--	--	0.80	0.0	--
MAY											
22...	1232	12.0	0	2.0	230	--	--	3.70	0.0	0.0	--
JUN											
13...	1055	20.0	0	0	--	1210	0.54	5.00	--	--	7.0
JUL											
03...	1117	--	100	0	--	689	0.44	4.10	--	--	6.9
30...	1120	17.0	90	2.0	230	618	0.52	4.20	--	--	6.4
AUG											
20...	0953	13.5	100	1.0	180	504	0.49	--	--	--	6.9
SEP											
10...	1100	10.0	--	1.0	0	785	0.77	3.10	--	--	5.9

DATE	TIME	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) *(00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) *(00925)	ALKALINITY LAB (MG/L AS CACO3) *(90410)	CHLORIDE, DISSOLVED (MG/L AS CL) *(00940)	SILICA, DISSOLVED (MG/L AS SIO2) *(00955)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) *(00631)
OCT									
07...	1200	--	--	--	--	--	5.9	--	0.011
07...	1215	61	0	22	1.5	71	--	11	0.010
JAN									
21...	1225	83	0	28	3.1	87	7.5	14	0.072
21...	1230	66	0	20	3.8	92	--	17	0.200
MAY									
22...	1240	69	2	23	3.2	67	--	7.6	0.034
22...	1245	61	0	21	2.4	84	--	--	0.064
JUN									
13...	1130	72	10	25	2.4	62	5.8	9.4	0.002
13...	1140	76	5	25	3.2	71	--	11	0.022
JUL									
03...	1120	51	0	18	1.4	70	5.0	9.1	0.001
03...	1130	58	0	21	1.4	85	--	11	0.008
30...	1130	63	0	22	1.9	74	6.0	9.4	0.002
30...	1140	68	0	23	2.6	82	--	12	0.001
AUG									
20...	1000	98	28	34	3.1	70	6.2	11	<0.001
20...	1010	80	5	27	3.1	75	--	11	0.005
SEP									
10...	1110	67	0	22	2.9	70	6.2	9.8	0.004
10...	1120	--	--	--	--	71	--	9.3	0.002

* ANALYZED BY THE ALASKA DEPARTMENT OF FISH AND GAME LABORATORY, SOLDOTNA, ALASKA

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

612147150091400 - HORSESHOE LK W ARM PT MACKENZIE NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) *(00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) *(00625)	PHOSPHORUS, TOTAL (MG/L AS P) *(00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) *(00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) *(00671)	IRON, DISSOLVED (UG/L AS FE) *(01046)	NITROGEN NITRATE DISSOLV (UG/L) *(91003)	PHOSPHORUS, ORTHO, DISSOLVED (UG/L AS P) *(91004)
OCT								
07...	0.017	0.26	0.009	0.004	0.002	--	11.4	2.5
07...	0.014	0.26	0.008	0.003	0.002	140	10.2	2.0
JAN								
21...	<0.001	0.24	0.008	--	0.003	70	72.0	3.2
21...	0.019	0.39	0.016	0.010	0.008	1000	200	8.0
MAY								
22...	<0.001	0.20	0.007	0.002	0.001	220	34.3	1.4
22...	0.013	0.34	0.009	--	0.005	610	64.3	5.4
JUN								
13...	<0.001	0.21	0.007	0.002	0.001	100	2.2	1.2
13...	0.010	0.28	0.011	0.003	0.001	320	21.7	1.4
JUL								
03...	<0.001	0.26	0.008	0.003	0.001	90	0.80	1.4
03...	<0.001	0.30	0.016	0.003	0.001	260	7.8	1.4
30...	<0.001	0.25	0.006	0.002	0.002	150	1.8	2.4
30...	<0.001	0.28	0.016	0.002	0.003	380	1.0	3.2
AUG								
20...	0.009	0.24	0.006	0.004	0.003	70	<1.0	2.8
20...	0.022	0.28	0.013	0.005	0.003	310	4.6	2.9
SEP								
10...	0.012	0.30	0.009	0.004	0.004	110	4.1	3.5
10...	0.010	0.24	0.009	0.003	0.003	70	1.5	2.8

* ANALYZED BY THE ALASKA DEPARTMENT OF FISH AND GAME LABORATORY, SOLDOTNA, ALASKA

612158150081600 - HORSESHOE LK E ARM PT MACKENZIE NR ANCHORAGE AK

DATE	TIME	SAMPLING DEPTH (M) (00098)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	CHLOROPHYLL A FLUOROMETRIC METHOD CORR. (UG/L) (32209)
OCT									
07...	1237	0.10	166	8.20	6.0	764	9.7	78	--
07...	1238	0.50	166	8.20	6.0	764	9.6	77	--
07...	1239	1.0	166	8.20	6.0	764	9.7	78	1.37
07...	1240	1.5	166	8.20	6.0	764	9.3	75	--
07...	1241	2.0	166	8.20	6.0	764	9.3	75	1.37
07...	1242	2.5	166	8.20	6.0	764	9.3	75	--
07...	1243	3.0	166	8.20	6.0	764	9.1	73	1.65
07...	1244	3.5	166	8.10	6.0	764	9.2	74	--
07...	1245	4.0	166	8.10	6.0	764	9.0	72	3.18
07...	1246	4.5	166	8.10	6.0	764	8.9	71	--
07...	1247	5.0	166	8.10	6.0	764	8.7	70	--
07...	1248	5.5	167	8.00	6.0	764	8.7	70	--
JAN									
21...	1305	0.10	166	7.20	0.5	749	5.8	41	--
21...	1306	0.50	173	7.30	1.5	749	5.0	36	--
21...	1307	1.0	188	7.40	2.0	749	4.4	33	0.580
21...	1308	1.5	201	7.50	3.0	749	3.8	29	--
21...	1309	2.0	209	7.60	3.5	749	2.2	17	--
21...	1310	2.5	216	7.60	3.5	749	1.4	11	--
21...	1311	3.0	226	7.60	3.5	749	0	0	--
21...	1312	3.5	243	7.60	4.0	749	0	0	--
21...	1313	4.0	271	7.60	4.5	749	0	0	--
MAY									
22...	1100	0.10	181	7.90	11.5	762	12.3	113	--
22...	1101	0.50	181	8.00	11.5	762	11.8	108	--
22...	1102	1.0	181	8.00	11.5	762	11.8	108	2.69
22...	1103	1.5	181	8.10	11.5	762	11.6	106	--
22...	1104	2.0	183	8.10	10.5	762	11.2	101	2.75
22...	1105	2.5	184	8.10	9.5	762	10.6	93	--
22...	1106	3.0	185	8.10	8.5	762	10.4	89	3.48
22...	1107	3.5	187	8.10	8.0	762	10.3	87	--
22...	1108	4.0	189	8.10	7.5	762	9.8	82	3.29
22...	1109	4.5	194	8.20	7.5	762	10.2	85	--
22...	1110	5.0	204	8.40	7.5	762	11.4	95	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

612158150081600 - HORSESHOE LK E ARM PT MACKENZIE NR ANCHORAGE AK-Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLING DEPTH (M) (00098)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	CHLOROPHYLL A FLUOROMETRIC METHOD CORR. (UG/L) (32209)
JUN									
13...	1105	0.50	173	8.40	16.0	761	11.6	117	--
13...	1106	1.0	173	8.40	16.0	761	11.4	115	2.47
13...	1107	1.5	174	8.40	15.5	761	11.2	113	--
13...	1108	2.0	174	8.40	15.5	761	11.2	113	2.66
13...	1109	2.5	174	8.40	15.5	761	11.0	110	--
13...	1110	3.0	175	8.40	15.0	761	10.1	101	2.69
13...	1111	3.5	180	8.40	15.0	761	11.2	111	--
13...	1112	4.0	189	8.70	14.0	761	14.5	140	2.98
13...	1113	4.5	190	8.90	13.5	761	15.0	144	--
13...	1114	5.0	190	9.00	13.0	761	16.5	156	--
JUL									
03...	1200	0.10	148	8.50	18.0	762	10.6	112	--
03...	1201	0.50	148	8.50	18.0	762	10.6	112	--
03...	1202	1.0	148	8.50	18.0	762	10.7	114	1.33
03...	1203	1.5	148	8.50	18.0	762	10.5	111	--
03...	1204	2.0	148	8.50	18.0	762	10.4	110	1.48
03...	1205	2.5	148	8.50	18.0	762	10.3	109	--
03...	1206	3.0	149	8.50	18.0	762	10.3	109	1.51
03...	1207	3.5	151	8.50	18.0	762	10.8	114	--
03...	1208	4.0	155	8.50	17.5	762	11.0	116	1.49
03...	1209	4.5	160	8.70	17.5	762	12.8	134	--
03...	1210	5.0	166	8.70	17.0	762	12.6	131	--
30...	1200	0.10	172	8.40	17.5	767	9.9	103	--
30...	1201	0.50	171	8.40	18.0	767	9.9	103	--
30...	1202	1.0	170	8.40	18.0	767	9.8	102	1.97
30...	1203	1.5	169	8.40	17.5	767	9.8	102	--
30...	1204	2.0	170	8.40	17.5	767	9.8	102	2.17
30...	1205	2.5	170	8.40	17.5	767	9.6	100	--
30...	1206	3.0	170	8.30	17.5	767	9.5	99	2.28
30...	1207	3.5	171	8.30	17.5	767	9.0	94	--
30...	1208	4.0	172	8.30	17.5	767	9.2	95	2.34
30...	1209	4.5	173	8.30	17.5	767	9.0	93	--
30...	1210	5.0	178	8.10	17.0	767	7.4	76	--
30...	1211	5.3	181	7.90	17.0	767	5.4	56	--
30...	1212	5.5	190	7.80	17.0	767	1.7	17	--
AUG									
20...	1028	0.10	167	8.10	--	771	10.9	--	--
20...	1029	0.50	167	8.20	--	771	10.6	--	--
20...	1030	1.0	166	8.20	--	771	10.4	--	1.50
20...	1031	1.5	165	8.20	--	771	10.3	--	--
20...	1032	2.0	166	8.20	--	771	10.3	--	1.58
20...	1033	2.5	166	8.20	--	771	10.3	--	--
20...	1034	3.0	168	8.10	--	771	9.7	--	1.72
20...	1035	3.5	161	8.10	--	771	8.2	--	--
20...	1036	4.0	164	8.00	--	771	8.0	--	2.09
20...	1037	4.5	166	8.10	--	771	8.7	--	--
20...	1038	5.0	168	8.10	--	771	9.2	--	--
20...	1039	5.5	185	7.80	--	771	4.1	--	--
SEP									
10...	1132	0.10	153	7.80	12.5	771	11.3	105	--
10...	1133	0.50	153	7.90	12.5	771	10.9	101	--
10...	1134	1.0	153	7.90	12.5	771	10.7	99	1.46
10...	1135	1.5	153	8.10	12.5	771	10.7	99	--
10...	1136	2.0	154	8.00	12.5	771	10.6	98	1.43
10...	1137	2.5	154	8.00	12.5	771	10.5	97	--
10...	1138	3.0	155	8.00	12.5	771	10.3	96	1.46
10...	1139	3.5	154	8.00	12.5	771	10.2	94	--
10...	1140	4.0	155	8.00	12.5	771	10.2	94	1.53
10...	1141	4.5	155	8.00	12.5	771	10.2	94	--
10...	1142	5.0	155	8.00	12.5	771	10.2	94	--
10...	1143	5.5	156	7.90	12.5	771	5.5	51	--

SOUTH-CENTRAL ALASKA--Continued

612158150081600 - HORSESHOE LK E ARM PT MACKENZIE NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	TEMPER-ATURE, AIR (DEG C) (00020)	CLOUD COVER (PER-CENT) (00032)	WIND SPEED (MILES PER HOUR) (00035)	WIND DIREC-TION (DEG. FROM TRUE NORTH) (00036)	LIGHT INCID. 400-700NM INTENS. (U-EINS /SQM/S) (00200)	LIGHT, ATTENU-ATION COEFFI-CIENT (ALPHA/ METER) (70971)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	ICE THICK-NESS METERS (82131)	SNOW DEPTH INCHES (82300)	LIGHT DEPTH TO 1 % OF SURFACE LIGHT METERS (85328)
OCT											
07...	1250	6.5	95	0	--	326	0.35	>6.30	--	--	>5.0
JAN											
21...	1314	-6.0	100	5.0	0	--	--	--	0.90	0.0	--
MAY											
22...	1112	12.5	0	1.0	230	1450	0.45	3.40	0.0	0.0	5.3
JUN											
13...	1116	20.0	0	0	--	1490	0.42	5.00	--	--	75
JUL											
03...	1212	16.0	100	0	--	776	0.28	4.80	--	--	532
30...	1213	18.5	90	1.0	180	54.1	0.34	3.90	--	--	52
AUG											
20...	1040	15.0	90	0	--	642	0.36	4.40	--	--	52
SEP											
10...	1144	10.5	--	1.0	0	894	0.44	5.52	--	--	5.5

DATE	TIME	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) *(00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) *(00925)	ALKA-LINITY LAB (MG/L AS CACO3) *(90410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) *(00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) *(00955)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) *(00631)
OCT									
07...	1300	86	1	31	2.2	86	2.5	11	0.003
07...	1315	74	0	26	2.2	85	--	11	0.003
JAN									
21...	1320	77	0	27	2.3	92	2.9	14	0.074
21...	1330	82	0	29	2.3	100	--	14	0.044
MAY									
22...	1115	86	0	29	3.2	90	3.7	--	< 0.001
22...	1116	--	--	--	--	--	--	--	--
22...	1117	--	--	--	--	--	--	--	--
22...	1118	--	--	--	--	--	--	--	--
22...	1120	97	4	33	3.6	93	--	--	0.002
JUN									
13...	1220	--	--	29	< 0.40	80	3.8	8.5	0.002
13...	1230	83	0	28	3.2	84	--	8.6	0.002
JUL									
03...	1220	61	0	21	2.1	80	3.2	8.3	< 0.001
03...	1230	61	0	21	2.1	80	--	8.1	< 0.001
30...	1220	74	0	26	2.3	84	3.4	8.6	< 0.010
30...	1230	76	0	26	2.6	86	--	8.6	< 0.010
AUG									
20...	1050	82	3	33	0.0	79	--	8.9	< 0.010
20...	1100	95	13	33	3.1	82	--	8.9	< 0.010
SEP									
10...	1150	70	0	22	3.6	87	3.0	8.8	< 0.010

* ANALYZED BY THE ALASKA DEPARTMENT OF FISH AND GAME LABORATORY, SOLDOTNA, ALASKA

SOUTH-CENTRAL ALASKA--Continued

612158150081600 - HORSESHOE LK E ARM PT MACKENZIE NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) *(00608)	NITROGEN, AMMONIA + ORGANIC TOTAL (MG/L AS N) *(00625)	PHOSPHORUS, TOTAL (MG/L AS P) *(00665)	PHOSPHORUS, DISSOLVED (MG/L AS P) *(00666)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) *(00671)	CARBON, INORGANIC, TOTAL (MG/L AS C) *(00685)	IRON, DISSOLVED (UG/L AS FE) *(01046)	NITROGEN NITRATE DISSOLV (UG/L) *(91003)	PHOSPHORUS, ORTHO, DISSOLVED (UG/L AS P) *(91004)
OCT									
07...	0.001	0.16	0.007	0.003	0.003	--	< 10	3.3	3.2
07...	0.002	0.22	0.005	0.004	0.004	--	20	3.3	3.7
JAN									
21...	0.005	0.17	--	0.009	0.007	--	20	74.1	7.4
21...	0.004	0.18	--	0.008	0.007	--	10	44.1	7.1
MAY									
22...	< 0.001	0.17	0.011	0.004	0.002	20	< 10	< 0.80	1.8
22...	--	--	--	--	--	19	--	--	--
22...	--	--	--	--	--	18	--	--	--
22...	--	--	--	--	--	18	--	--	--
22...	< 0.001	0.18	0.013	0.003	0.002	--	< 10	2.2	1.6
JUN									
13...	< 0.001	0.20	0.010	0.004	0.003	--	--	2.2	3.4
13...	< 0.001	0.23	0.013	0.003	0.003	--	< 10	2.2	2.8
JUL									
03...	< 0.001	0.20	0.009	0.002	0.001	--	10	< 0.80	1.2
03...	< 0.001	0.24	0.012	0.003	0.001	--	10	< 0.80	1.0
30...	< 0.001	0.24	0.008	0.002	0.002	--	20	1.8	1.8
30...	< 0.001	0.23	0.010	0.002	0.003	--	20	1.8	2.6
AUG									
20...	0.007	0.24	0.009	0.005	0.004	--	10	4.0	3.7
20...	0.006	0.23	0.008	0.007	0.004	--	< 10	2.1	4.3
SEP									
10...	0.005	0.20	8.70	2.10	0.003	--	15	4.1	2.6

* ANALYZED BY THE ALASKA DEPARTMENT OF FISH AND GAME LABORATORY, SOLDOTNA, ALASKA

612209150080900 - HORSESHOE LK P NR PT MACKENZIE NR ANCHORAGE AK

DATE	TIME	SAMPLING DEPTH (M) (00098)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)	CHLOROPHYLL A FLUOROMETRIC METHOD CORR. (UG/L) (32209)
OCT									
07...	1333	0.10	162	8.20	5.0	762	9.5	74	--
07...	1334	0.50	162	8.00	5.0	762	9.5	74	--
07...	1335	1.0	162	8.20	5.0	762	9.5	74	1.03
07...	1336	1.5	162	8.00	5.0	762	9.3	73	--
07...	1337	2.0	162	8.00	5.0	762	9.5	74	--
07...	1338	2.5	163	8.00	5.0	762	9.3	73	--
07...	1339	3.0	163	8.00	5.0	762	9.2	72	--
07...	1340	3.5	165	8.00	5.0	762	9.1	71	--
JAN									
21...	1438	0.10	181	7.30	1.0	748	3.9	28	--
21...	1439	0.50	184	7.30	2.0	748	1.3	10	--
21...	1440	1.0	203	7.40	3.0	748	0	0	--
21...	1441	1.5	219	7.40	4.0	748	0	0	--
21...	1442	2.0	253	7.30	4.5	748	0	0	--
21...	1443	2.5	273	7.30	5.0	748	0	0	--
MAY									
22...	1314	0.10	177	8.00	12.5	759	11.3	106	--
22...	1315	0.50	177	8.00	12.0	759	11.2	105	--
22...	1316	1.0	177	8.00	12.0	759	11.2	104	4.45
22...	1317	1.5	177	8.10	11.5	759	11.3	104	--
22...	1318	2.0	177	8.10	11.5	759	11.3	104	--
22...	1319	2.5	178	8.10	11.0	759	11.3	103	--
22...	1320	3.0	177	8.20	10.5	759	11.3	102	--
JUN									
13...	1239	0.10	172	8.20	16.5	761	13.2	135	--
13...	1240	0.50	172	8.30	16.5	761	12.8	131	--
13...	1241	1.0	172	8.30	16.0	761	12.6	128	4.11
13...	1242	1.5	172	8.40	15.5	761	12.5	126	--
13...	1243	2.0	173	8.30	15.5	761	11.8	118	--
13...	1244	2.5	172	8.30	15.0	761	12.3	123	--
13...	1245	3.0	176	8.00	14.5	761	10.0	98	--
13...	1246	3.5	176	8.10	14.5	761	10.8	106	--

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

SOUTH-CENTRAL ALASKA--Continued

612209150080900 - HORSESHOE LK P NR PT MACKENZIE NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAM-PLING DEPTH (M) (00098)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	BARO-METRIC PRES-SURE (MM OF HG) (00025)	OXYGEN, DIS-SOLVED (MG/L) (00300)	OXYGEN, DIS-SOLVED (PER-CENT SATUR-ATION) (00301)	CHLORO-PHYLL A FLUORO-METRIC METHOD CORR. (UG/L) (32209)
JUL									
03...	1243	0.10	152	8.30	17.5	762	11.5	121	--
03...	1244	0.50	152	8.30	17.5	762	10.9	114	--
03...	1245	1.0	152	8.30	17.5	762	10.8	113	1.12
03...	1246	1.5	154	8.20	17.5	762	10.5	110	--
03...	1247	2.0	154	8.20	17.5	762	10.0	104	--
03...	1248	2.5	156	8.10	17.0	762	10.0	103	--
03...	1249	3.0	157	8.00	16.0	762	9.2	93	--
03...	1250	3.5	158	8.00	15.5	762	4.0	40	--
30...	1245	0.10	169	8.20	16.5	769	10.9	111	--
30...	1246	0.50	169	8.20	16.5	769	10.8	110	--
30...	1247	1.0	169	8.20	16.5	769	11.1	112	2.54
30...	1248	1.5	169	8.20	16.0	769	11.2	113	--
30...	1249	2.0	170	8.20	16.0	769	11.0	110	--
30...	1250	2.5	171	8.10	15.5	769	10.5	104	--
30...	1251	3.0	171	8.10	15.0	769	10.5	103	--
30...	1252	3.4	176	7.80	14.5	769	8.7	85	--
SEP									
10...	1220	0.10	156	7.80	11.0	771	11.5	103	--
10...	1221	0.50	156	7.80	11.0	771	11.3	101	--
10...	1222	1.0	156	7.80	11.0	771	11.1	99	1.26
10...	1223	1.5	156	7.80	10.5	771	11.0	98	--
10...	1224	2.0	157	7.80	10.5	771	10.5	93	--
10...	1225	2.5	158	7.70	10.0	771	10.4	91	--
10...	1226	3.0	158	7.70	10.0	771	10.8	95	--
10...	1227	3.3	165	7.70	10.0	771	8.2	72	--

DATE	TIME	TEMPER-ATURE, AIR (DEG C) (00020)	CLOUD COVER (PER-CENT) (00032)	WIND SPEED (MILES PER HOUR) (00035)	WIND DIREC-TION (DEG. FROM TRUE NORTH) (00036)	TRANS-PAR-ENCY (SECCHI DISK) (M) (00078)	ICE THICK-NESS METERS (82131)	SNOW DEPTH INCHES (82300)
OCT								
07...	1342	7.5	100	1.0	--	>3.50	--	--
JAN								
21...	1444	-5.5	100	5.0	0	--	0.80	0.0
MAY								
22...	1322	15.5	0	2.0	225	--	--	--
JUN								
13...	1248	20.0	0	0	--	>3.50	--	--
JUL								
03...	1251	--	100	0	--	>3.50	--	--
30...	1253	19.0	90	1.0	180	>3.40	--	--
AUG								
20...	1138	14.5	95	1.0	180	>3.50	--	--
SEP								
10...	1228	11.0	0	1.0	0	>3.30	--	--

612209150080900 - HORSESHOE LK P NR PT MACKENZIE NR ANCHORAGE AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) *(00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) *(00925)	ALKA-LINITY LAB (MG/L AS CACO3) *(90410)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) *(00940)	SILICA, DIS-SOLVED (MG/L AS SIO2) *(00955)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) *(00631)
OCT									
07...	1345	74	0	26	2.2	84	1.6	11	0.053
JAN									
21...	1450	85	0	29	3.1	100	2.2	14	0.050
MAY									
22...	1330	63	0	20	3.2	89	2.5	--	0.110
JUN									
13...	1250	69	0	20	4.7	81	2.6	7.2	0.001
JUL									
03...	1300	61	0	21	2.1	86	1.6	7.6	0.001
30...	1300	78	0	27	2.6	87	1.9	6.9	0.001
AUG									
20...	1140	76	0	26	2.6	85	1.8	7.8	0.010
SEP									
10...	1230	90	0	30	3.6	90	1.9	9.1	0.002

DATE	NITRO-GEN, AMMONIA DIS-SOLVED (MG/L AS N) *(00608)	NITRO-GEN,AM-MONIA + ORGANIC TOTAL (MG/L AS N) *(00625)	PHOS-PHORUS, TOTAL (MG/L AS P) *(00665)	PHOS-PHORUS, DIS-SOLVED (MG/L AS P) *(00666)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) *(00671)	IRON, DIS-SOLVED (UG/L AS FE) *(01046)	NITRO-GEN NITRATE DISSOLV (UG/L) *(91003)	PHOS-PHORUS, ORTHO, DIS-SOLVED (UG/L AS P) *(91004)
OCT								
07...	0.004	0.15	0.005	0.005	0.005	< 10	53.4	5.0
JAN								
21...	0.004	0.17	0.010	--	0.006	20	49.6	5.8
MAY								
22...	< 0.001	0.21	0.018	0.010	0.003	20	110	2.8
JUN								
13...	< 0.001	0.19	0.011	0.002	0.001	10	0.80	1.0
JUL								
03...	< 0.001	0.21	0.010	0.002	0.001	20	0.80	1.1
30...	0.001	0.19	0.008	0.005	0.002	30	1.0	2.5
AUG								
20...	0.008	0.21	0.008	0.006	0.003	10	9.6	3.2
SEP								
10...	0.004	0.18	0.011	0.003	0.002	20	1.5	2.4

* ANALYZED BY THE ALASKA DEPARTMENT OF FISH AND GAME LABORATORY, SOLDOTNA, ALASKA

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

YUKON ALASKA

635342145503000 - BOLIO LK NR DELTA JUNCTION AK

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE WATER (DEG C) (00010)	BAROMETRIC PRESSURE (MM OF HG) (00025)	OXYGEN, DISSOLVED (MG/L) (00300)	OXYGEN, DISSOLVED (PERCENT SATURATION) (00301)
SEP								
10...	1115	0.50	100	7.60	10.5	735	9.6	89
10...	1117	2.00	99	7.60	10.5	735	9.4	87
10...	1119	3.00	99	7.60	10.0	735	9.4	87
10...	1121	4.50	99	7.60	10.0	735	9.3	86
10...	1123	6.00	99	7.60	10.0	735	9.2	85
10...	1125	7.50	99	7.60	10.0	735	9.2	85
10...	1127	9.00	99	7.60	10.0	735	9.3	86
10...	1129	10.5	98	7.60	10.0	735	9.3	85
10...	1131	12.0	98	7.70	10.0	735	9.2	85
10...	1133	12.8	99	7.70	10.0	735	9.2	85

DATE	TIME	SAMPLING DEPTH (FEET) (00003)	COLOR (PLATINUM-COBALT UNITS) (00080)	TURBIDITY (NTU) (00076)	OXYGEN DEMAND, CHEMICAL (HIGH LEVEL) (MG/L) (00340)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	STREPTOCOCCI FECAL, KF AGAR (COLS. PER 100 ML) (31673)	HARDNESS (MG/L AS CACO3) (00900)	HARDNESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DISSOLVED (MG/L AS CA) (00915)	MAGNESIUM, DISSOLVED (MG/L AS MG) (00925)
SEP 10...	1200	8.00	30	1.1	44	K10	<1	52	10	15	3.6

DATE	SODIUM, DISSOLVED (MG/L AS NA) (00930)	POTASSIUM, DISSOLVED (MG/L AS K) (00935)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY WH WAT TOTAL LAB MG/L AS CACO3 (00417)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DISSOLVED (MG/L AS SO4) (00945)	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	FLUORIDE, DISSOLVED (MG/L AS F) (00950)	SILICA, DISSOLVED (MG/L AS SIO2) (00955)
SEP 10...	1.0	3.0	41	44	42	51	0	9.2	0.90	<0.10	0.5

DATE	SOLIDS, SUM OF CONSTITUENTS, DISSOLVED (MG/L) (70301)	NITROGEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA DISSOLVED (MG/L AS N) (00608)	NITROGEN,AMMONIA + ORGANIC TOTAL (MG/L AS N) (00625)	NITROGEN, TOTAL (MG/L AS N) (00600)	PHOSPHORUS, TOTAL (MG/L AS P) (00665)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	ARSENIC TOTAL (UG/L AS AS) (01002)	ARSENIC TOTAL IN BOTTOM MATERIAL (UG/G AS AS) (01003)	BARIUM, TOTAL RECOVERABLE (UG/L AS BA) (01007)
SEP 10...	59	0.058	0.064	0.034	0.80	0.86	0.016	0.004	1	8	<100

DATE	BARIUM, RECOV. FM BOTTOM MATERIAL (UG/G AS BA) (01008)	CADMIUM TOTAL RECOVERABLE (UG/L AS CD) (01027)	CADMIUM RECOV. FM BOTTOM MATERIAL (UG/G AS CD) (01028)	CHROMIUM, RECOV. FM BOTTOM MATERIAL (UG/G) (01029)	COBALT, RECOV. FM BOTTOM MATERIAL (UG/G AS CO) (01038)	COPPER, TOTAL RECOVERABLE (UG/L AS CU) (01042)	COPPER, RECOV. FM BOTTOM MATERIAL (UG/G AS CU) (01043)	IRON, TOTAL RECOVERABLE (UG/L AS FE) (01045)	IRON, DISSOLVED (UG/L AS FE) (01046)	IRON, RECOV. FM BOTTOM MATERIAL (UG/G AS FE) (01170)
SEP 10...	70	<1	1	10	20	7	3	240	170	7600

DATE	LEAD, TOTAL RECOVERABLE (UG/L AS PB) (01051)	LEAD, RECOV. FM BOTTOM MATERIAL (UG/G AS PB) (01052)	MANGANESE, TOTAL RECOVERABLE (UG/L AS MN) (01055)	MANGANESE, DISSOLVED (UG/L AS MN) (01056)	MANGANESE, RECOV. FM BOTTOM MATERIAL (UG/G) (01053)	MERCURY TOTAL RECOVERABLE (UG/L AS HG) (71900)	MERCURY RECOV. FM BOTTOM MATERIAL (UG/G AS HG) (71921)	NICKEL, RECOV. FM BOTTOM MATERIAL (UG/G AS NI) (01068)	SILVER, TOTAL RECOVERABLE (UG/L AS AG) (01077)	ZINC, TOTAL RECOVERABLE (UG/L AS ZN) (01092)
SEP 10...	<5	10	20	9	140	<0.10	0.34	20	1	10

K NON-IDEAL COLONY COUNT

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

YUKON ALASKA--Continued

635342145503000 - BOLIO LK NR DELTA JUNCTION AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	ZINC, RECOV. FM BOTTOM MATERIAL (UG/G AS ZN) (01093)	GROSS ALPHA, DISSOLVED (UG/L AS U-NAT) (80030)	GROSS ALPHA, SUSP. TOTAL (UG/L AS U-NAT) (80040)	GROSS BETA, DISSOLVED (PCI/L AS CS-137) (03515)	GROSS BETA, SUSP. TOTAL (PCI/L AS CS-137) (03516)	GROSS BETA, DISSOLVED (PCI/L AS SR/YT-90) (80050)	GROSS BETA, SUSP. TOTAL (PCI/L AS SR/YT-90) (80060)	TANNIN AND LIGNIN (MG/L) (32240)	CHLOR-A PHYTOPLANKTON CHROMO FLUOROM (UG/L) (70953)	CHLOR-B PHYTOPLANKTON CHROMO FLUOROM (UG/L) (70954)
SEP										
10...	80	<0.4	<0.4	4.3	<0.4	3.7	<0.4	1.1	5.40	0.300

DATE	TIME	DICHLOROBROMOMETHANE TOTAL (UG/L) (32101)	CARBONTETRACHLORIDE TOTAL (UG/L) (32102)	1,2-DICHLOROETHANE TOTAL (UG/L) (32103)	BROMOFORM TOTAL (UG/L) (32104)	CHLORODIBROMOMETHANE TOTAL (UG/L) (32105)	CHLOROFORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)	ACENAPHTHYLENE TOTAL (UG/L) (34200)	ACENAPHTHYLENE BOT.MAT (UG/KG) (34203)	ACENAPHTHENE TOTAL (UG/L) (34205)
SEP												
10...	1200	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<5.0	<200	<5.0

DATE	ACENAPHTHENE BOT.MAT (UG/KG) (34208)	ANTHRACENE TOTAL (UG/L) (34220)	ANTHRACENE BOT.MAT (UG/KG) (34223)	BENZO B FLUORANTHENE TOTAL (UG/L) (34230)	BENZO B FLUORANTHENE BOT.MAT (UG/KG) (34233)	BENZO K FLUORANTHENE TOTAL (UG/L) (34242)	BENZO K FLUORANTHENE BOT.MAT (UG/KG) (34245)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	BENZO-A-PYRENE BOT.MAT (UG/KG) (34250)	BIS 2-CHLOROETHYL ETHER TOTAL (UG/L) (34273)	BIS (2-CHLOROETHYL) ETHER BOT.MAT (UG/KG) (34276)	BIS (2-CHLOROETHOXY) METHANE TOTAL (UG/L) (34278)
SEP												
10...	<200	<5.0	<200	<10.0	<400	<10.0	<400	<10.0	<400	<5.0	<200	<5.0

DATE	BIS (2-CHLOROETHOXY) METHANE BOT.MAT (UG/KG) (34281)	BIS (2-CHLOROISOPROPYL) ETHER TOTAL (UG/L) (34283)	BIS (2-CHLOROISOPROPYL) ETHER BOT.MAT (UG/KG) (34286)	N-BUTYL BENZYL PHTHALATE TOTAL (UG/L) (34292)	N-BUTYL BENZYL PHTHALATE BOT.MAT (UG/KG) (34295)	CHLOROBENZENE TOTAL (UG/L) (34301)	CHLOROETHANE TOTAL (UG/L) (34311)	CHRYSENE TOTAL (UG/L) (34320)	CHRYSENE BOT.MAT (UG/KG) (34323)	DIETHYL PHTHALATE TOTAL (UG/L) (34336)	DIETHYL PHTHALATE BOT.MAT (UG/KG) (34339)	DIMETHYL PHTHALATE TOTAL (UG/L) (34341)
SEP												
10...	<200	<5.0	<200	<5.0	<200	<3.0	<3.0	<10.0	<400	<5.0	<200	<5.0

DATE	DIMETHYL PHTHALATE BOT.MAT (UG/KG) (34344)	ETHYLBENZENE TOTAL (UG/L) (34371)	FLUORANTHENE TOTAL (UG/L) (34376)	FLUORANTHENE BOT.MAT (UG/KG) (34379)	FLUORENE TOTAL (UG/L) (34381)	FLUORENE BOT.MAT (UG/L) (34384)	HEXACHLOROCYCLOPENTADIENE TOTAL (UG/L) (34386)	HEXACHLOROCYCLOPENTADIENE BOT.MAT (UG/KG) (34389)	HEXACHLOROETHANE TOTAL (UG/L) (34396)	HEXACHLOROETHANE BOT.MAT (UG/KG) (34399)	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L) (34403)	INDENO (1,2,3-CD) PYRENE BOT.MAT (UG/KG) (34406)
SEP												
10...	<200	<3.0	<5.0	<200	<5.0	<200	<5.0	<200	<5.0	<200	<10.0	<200

DATE	ISOPHORONE TOTAL (UG/L) (34408)	ISOPHORONE BOT.MAT (UG/KG) (34411)	METHYLBROMIDE TOTAL (UG/L) (34413)	METHYLCHLORIDE TOTAL (UG/L) (34418)	METHYLENE CHLORIDE TOTAL (UG/L) (34423)	N-NITROSODI-N-PROPYLAMINE TOTAL (UG/L) (34428)	N-NITROSODI-N-PROPYLAMINE BOT.MAT (UG/KG) (34431)	N-NITROSODIPHENYLAMINE TOTAL (UG/L) (34433)	N-NITROSODIPHENYLAMINE BOT.MAT (UG/KG) (34436)	N-NITROSODIMETHYLAMINE TOTAL (UG/L) (34438)	N-NITROSODIMETHYLAMINE BOT.MAT (UG/KG) (34441)	NAPHTHALENE BOT.MAT (UG/KG) (34445)
SEP												
10...	<5.0	<200	<3.0	<3.0	<3.0	<5.0	<200	<5.0	<200	<5.0	<200	<200

DATE	NITROBENZENE TOTAL (UG/L) (34447)	NITROBENZENE BOT.MAT (UG/KG) (34450)	PARACHLOROMETA CRESOL TOTAL (UG/L) (34452)	PARACHLOROMETA CRESOL BOT.MAT (UG/KG) (34455)	PHENANTHRENE TOTAL (UG/L) (34461)	PHENANTHRENE BOT.MAT (UG/KG) (34464)	PYRENE TOTAL (UG/L) (34469)	PYRENE BOT.MAT (UG/KG) (34472)	TETRACHLOROETHYLENE TOTAL (UG/L) (34475)	TRICHLOROFLUOROMETHANE TOTAL (UG/L) (34488)	1,1-DICHLOROETHANE TOTAL (UG/L) (34496)	1,1-DICHLOROETHYLENE TOTAL (UG/L) (34501)
SEP												
10...	<5.0	<200	<5.0	<600	<5.0	<200	<5.0	<200	<3.0	<3.0	<3.0	<3.0

ANALYSES OF SAMPLES COLLECTED AT MISCELLANEOUS LAKE SITES

YUKON ALASKA--Continued

635342145503000 - BOLIO LK NR DELTA JUNCTION AK--Continued

WATER QUALITY DATA, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	1,1,1- TRI- CHLORO- ETHANE TOTAL (UG/L) (34506)	1,1,2- TRI- CHLORO- ETHANE TOTAL (UG/L) (34511)	1,1,2,2 TETRA- CHLORO- ETHANE TOTAL (UG/L) (34516)	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE TOTAL (UG/L) (34521)	BENZOGH I PERYL ENE1,12 -BENZOP ERYLENE BOT.MAT (UG/KG) (34524)	BENZO A ANTHRAC ENE1,2- BENZANT HRACENE TOTAL (UG/L) (34526)	BENZO A ANTHRAC ENE1,2- BENZANT HRACENE BOT.MAT (UG/KG) (34529)	1,2-DI- CHLORO- BENZENE TOTAL (UG/L) (34536)	1,2-DI- CHLORO- BENZENE BOT.MAT (UG/KG) (34539)	1,2-DI- CHLORO- PROPANE TOTAL (UG/L) (34541)	1,2- TRANSDI CHLORO- ETHYL- ENE TOTAL (UG/L) (34546)	1,2,4- TRI- CHLORO- BENZENE TOTAL (UG/L) (34551)
SEP 10...	< 3.0	< 3.0	< 3.0	< 10.0	< 400	< 10.0	< 200	< 3.0	< 200	< 3.0	< 3.0	< 5.0

DATE	1,2,4- TRI- CHLORO- BENZENE BOT.MAT (UG/KG) (34554)	1,2,5,6 -DIBENZ -ANTHRA -CENE TOTAL (UG/L) (34556)	1,2,5,6 -DIBENZ -ANTHRA -CENE BOT.MAT (UG/KG) (34559)	1,3-DI- CHLORO- PROPANE TOTAL (UG/L) (34561)	1,3-DI- CHLORO- BENZENE TOTAL (UG/L) (34566)	1,3-DI- CHLORO- BENZENE BOT.MAT (UG/KG) (34569)	1,4-DI- CHLORO- BENZENE TOTAL (UG/L) (34571)	1,4-DI- CHLORO- BENZENE BOT.MAT (UG/KG) (34574)	2- CHLORO- ETHYL- VINYL- ETHER TOTAL (UG/L) (34576)	2- CHLORO- NAPH- THALENE TOTAL (UG/L) (34581)	2- CHLORO- NAPH- THALENE BOT.MAT (UG/KG) (34584)	2- CHLORO- PHENOL TOTAL (UG/L) (34586)
SEP 10...	< 200	< 10.0	< 400	< 3.0	< 3.0	< 200	< 3.0	< 200	< 3.0	< 5.0	< 200	< 6.0

DATE	2- CHLORO- PHENOL BOT.MAT (UG/KG) (34589)	2- NITRO- PHENOL TOTAL (UG/L) (34591)	2- NITRO- PHENOL BOT.MAT (UG/KG) (34594)	DI-N- OCTYL PHTHAL- ATE TOTAL (UG/L) (34596)	DI-N- OCTYL PHTHAL- ATE BOT.MAT (UG/KG) (34599)	2,4-DI- CHLORO- PHENOL TOTAL (UG/L) (34601)	2,4-DI- CHLORO- PHENOL BOT.MAT (UG/KG) (34604)	2,4-DI- METHYL- PHENOL TOTAL (UG/L) (34606)	2,4-DP, IN BOTTOM MAT. (UG/KG) (34609)	2,4-DI- NITRO- TOLUENE TOTAL (UG/L) (34611)	2,4-DI- NITRO- TOLUENE BOT.MAT (UG/KG) (34614)	2,4,- DI- NITRO- PHENOL TOTAL (UG/L) (34616)
SEP 10...	< 200	< 6.0	< 200	< 10.0	< 400	< 6.0	< 200	< 6.0	< 200	< 5.0	< 200	< 20.0

DATE	2,4- DI- NITRO- PHENOL BOT.MAT (UG/KG) (34619)	2,4,6- TRI- CHLORO- PHENOL TOTAL (UG/L) (34621)	2,4,6- TRI- CHLORO- PHENOL BOT.MAT (UG/KG) (34624)	2,6-DI- NITRO- TOLUENE TOTAL (UG/L) (34626)	2,6-DI- NITRO- TOLUENE BOT.MAT (UG/KG) (34629)	4- BROMO- PHENYL PHENYL ETHER TOTAL (UG/L) (34636)	4- BROMO- PHENYL PHENYL ETHER BOT.MAT (UG/KG) (34639)	4- CHLORO- PHENYL PHENYL ETHER TOTAL (UG/L) (34641)	4- NITRO- PHENOL TOTAL (UG/L) (34646)	4- NITRO- PHENOL BOT.MAT (UG/KG) (34649)	4,6- DINITRO -ORTHO- CRESOL TOTAL (UG/L) (34657)	4,6- DINITRO -ORTHO- CRESOL BOT.MAT (UG/KG) (34660)
SEP 10...	< 600	< 5.0	< 600	< 5.0	< 200	< 5.0	< 200	< 200	< 30.0	< 600	< 30.0	< 600

DATE	DI- CHLORO- DI- FLUORO- METHANE TOTAL (UG/L) (34668)	PHENOL (C6H- 5OH) TOTAL (UG/L) (34694)	PHENOL (C6H- 5OH) BOT.MAT (UG/KG) (34695)	NAPHTH- ALENE TOTAL (UG/L) (34696)	TRANS- 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI- CHLORO- PROPENE TOTAL (UG/L) (34704)	PENTA- CHLORO- PHENOL TOTAL (UG/L) (39032)	PER- THANE TOTAL (UG/L) (39034)	PENTA- CHLORO- PHENOL BOT.MAT (UG/KG) (39061)	1,2- DIBROMO ETHYL- ENE TOTAL (UG/L) (39082)	BIS(2- ETHYL HEXYL) PHTHAL- ATE TOTAL (UG/L) (39100)	BIS(2- ETHYL HEXYL) PHTHAL- ATE BOT.MAT (UG/KG) (39102)
SEP 10...	< 3.0	< 6.0	< 200	< 5.0	< 3.0	< 3.0	< 30.0	< 0.1	< 600	< 3.0	< 5.0	< 200

DATE	DI-N- BUTYL PHTHAL- ATE TOTAL (UG/L) (39110)	DI-N- BUTYL PHTHAL- ATE BOT.MAT (UG/KG) (39112)	VINYL CHLO- RIDE TOTAL (UG/L) (39175)	TRI- CHLORO- ETHYL- ENE TOTAL (UG/L) (39180)	NAPH- THA- LENES, POLY- CHLOR. TOTAL (UG/L) (39250)	ALDRIN, TOTAL (UG/L) (39330)	LINDANE TOTAL (UG/L) (39340)	CHLOR- DANE, TOTAL (UG/L) (39350)	DDD, TOTAL (UG/L) (39360)	DDE, TOTAL (UG/L) (39365)	DDT, TOTAL (UG/L) (39370)	DI- ELDRIN TOTAL (UG/L) (39380)
SEP 10...	< 5.0	< 200	< 3.0	< 3.0	< 0.10	< 0.010	< 0.010	< 0.1	< 0.010	< 0.010	< 0.010	< 0.010

DATE	ENDO- SULFAN, TOTAL (UG/L) (39388)	ENDRIN, TOTAL (UG/L) (39390)	ETHION, TOTAL (UG/L) (39398)	TOX- APHENE, TOTAL (UG/L) (39400)	HEPTA- CHLOR, TOTAL (UG/L) (39410)	HEPTA- CHLOR EPOXIDE TOTAL (UG/L) (39420)	METH- OXY- CHLOR, TOTAL (UG/L) (39480)	PCB, TOTAL (UG/L) (39516)	MALA- THION, TOTAL (UG/L) (39530)	PARA- THION, TOTAL (UG/L) (39540)	DI- AZINON, TOTAL (UG/L) (39570)
SEP 10...	< 0.010	< 0.010	< 0.01	< 1	< 0.010	< 0.010	< 0.01	< 0.1	< 0.01	< 0.01	< 0.01

DATE	METHYL PARA- THION, TOTAL (UG/L) (39600)	HEXA- CHLORO- BENZENE TOTAL (UG/L) (39700)	HEXA- CHLORO- BENZENE TOT. IN BOTTOM MATL. (UG/KG) (39701)	HEXA- CHLORO- BUT- ADIENE TOTAL (UG/L) (39702)	HEXA- CHLORO- BUT- ADIENE BOT.MAT (UG/KG) (39705)	MIREX, TOTAL (UG/L) (39755)	TOTAL TRI- THION (UG/L) (39786)	METHYL TRI- THION, TOTAL (UG/L) (39790)	STYRENE TOTAL (UG/L) (77128)	TNT TOTAL (UG/L) (81360)	RDX TOTAL (UG/L) (81364)
SEP 10...	< 0.01	< 5.0	< 200	< 5.0	< 200	< 0.01	< 0.01	< 0.01	< 3.0	< 2.0	< 2.0

SOUTHEAST ALASKA

JUNEAU AREA

582359134352103. Local number, CD04006618CBCA3019.
LOCATION.--Lat 58°23'59", long 134°35'21", Hydrologic Unit 19060000, Mendenhall Loop Road, near Juneau. Owner: Harlan Olsen.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 6 in, depth 40 ft, screened 30 to 40 ft.
INSTRUMENTATION.--Continuous strip-chart recorder November 1983 to August 1984. Digital recorder from August 1984 to current year.
DATUM.--Elevation of land-surface datum is 50.53 ft above National Geodectic Vertical Datum of 1929 (determined from levels survey). Measuring Point: Top of casing 1.00 ft above land-surface datum.
PERIOD OF RECORD.--November 1983 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.66 ft below land-surface datum, Oct. 4, 1985; lowest, 10.85 ft below land-surface datum, Dec. 31, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	5.67	7.72	9.79	7.18	7.46	7.52	7.51	8.80	7.58	8.32	7.14	6.32
10	6.04	8.39	9.98	6.64	8.23	8.44	7.57	8.53	7.70	8.54	7.29	6.97
15	6.38	7.79	10.08	6.75	8.78	8.29	8.34	8.66	7.87	8.74	6.23	7.72
20	6.56	8.56	6.73	7.51	9.26	6.98	8.29	8.39	8.31	8.89	6.51	8.33
25	6.80	9.05	6.28	6.72	9.66	7.05	7.99	8.40	7.49	8.26	6.65	7.63
EOM	7.10	9.49	6.57	6.94	8.19	7.59	8.59	8.04	7.85	7.95	5.98	8.24

WTR YR 1986 HIGH 5.66 OCT 4 LOW 10.14 DEC 14-15

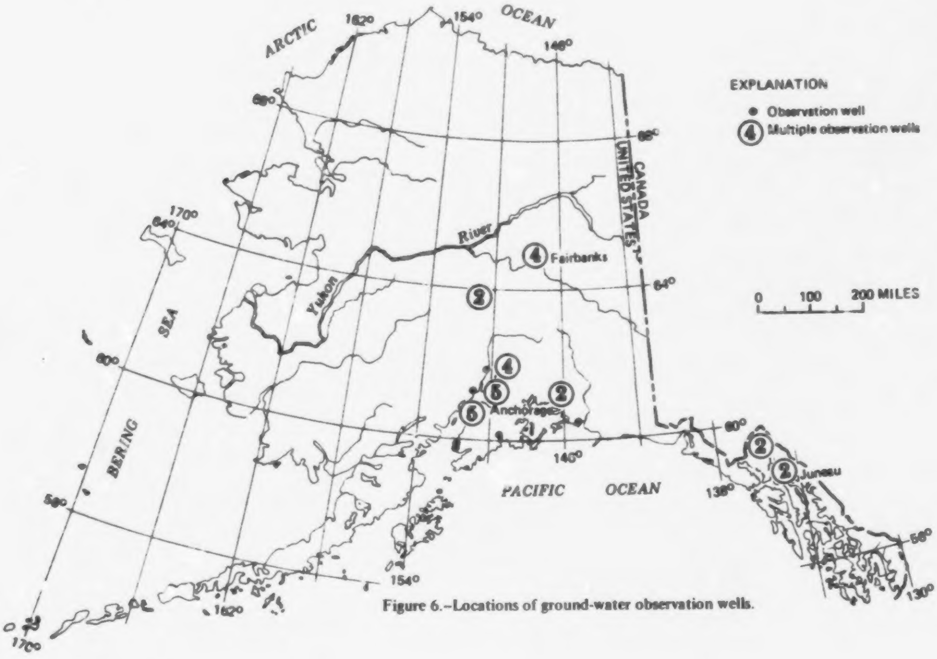

Figure 6.--Locations of ground-water observation wells.

BEST COPY AVAILABLE

582422134342001. Local number, CD04006618ABDB1003 85177.
LOCATION.--Lat 58°24'24", long 134°34'23", Hydrologic Unit 19060000, Mendenhall Loop Road, near Juneau. Owner: U.S. Forest Service.
AQUIFER.--Sand and gravel of Quaternary System.
WELL CHARACTERISTICS.--Diameter 6 in, depth 100 ft, screened 90 to 100 ft.
INSTRUMENTATION.--Digital recorder--1-hour punch.
DATUM.--Elevation of land-surface datum is 69 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring Point: Base of recorder shelter 5.00 ft above land-surface datum.
REMARKS.--Water level fluctuates with seasonal changes in flow of the Mendenhall River, 500 ft southwest of the well. Water level data for period June 3 to Sept. 30 missing due to vandalism. Prior to Oct. 1, 1980, water levels published were mean values for the day.
PERIOD OF RECORD.--June 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.33 ft above land-surface datum, Oct. 7, 1985; lowest, 10.26 ft below land-surface datum, Mar. 23, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	2.43	4.67	7.20	3.64	3.98	5.01	4.42	5.35	---			
10	2.49	5.48	7.67	3.62	4.75	5.16	4.32	5.00	---			
15	2.85	5.53	7.85	3.53	5.34	5.51	4.77	5.11	---			
20	3.09	5.93	4.83	3.98	6.03	4.83	5.18	5.01	---			
25	3.76	6.32	2.83	4.46	6.52	3.74	4.92	4.74	---			
EOM	4.31	6.89	3.08	3.35	6.12	4.15	5.37	4.35	---			

WTR YR 1986 HIGH 2.33 OCT 7 LOW 7.87 DEC 15

HAINES AREA

592242135544001. Local number, CD02905612BACB1002.
LOCATION.--Lat 59°22'42", long 135°54'40", Hydrologic Unit 19060000, on Tsirku Fan near Klukwan, 20 mi north of Haines. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 6 in, depth 220 ft, cased to 200 ft, casing slotted 123 to 158 ft.
INSTRUMENTATION.--Digital recorder--1-hour punch.
DATUM.--Elevation of land-surface datum is 161.63 ft above National Geodetic Vertical Datum of 1929 (determined from levels survey). Measuring point: Top of casing 1.77 ft above land-surface datum.
PERIOD OF RECORD.--December 1982 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 20.18 ft below land-surface datum, Aug. 11, 1986; lowest, 47.72 ft below land-surface datum, Apr. 4, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	28.26	36.04	34.98	34.76	37.91	36.88	37.99	36.65	25.45	22.82	20.79	23.62
10	29.29	36.55	35.61	35.59	37.82	37.14	38.40	34.18	26.81	22.07	20.26	24.25
15	30.37	36.52	36.65	36.35	37.99	37.39	38.61	32.24	28.03	21.81	20.64	25.31
20	31.81	36.13	36.43	36.80	37.91	37.36	38.99	30.37	27.54	20.52	21.78	26.45
25	33.13	36.43	34.17	37.30	37.71	37.58	38.91	28.07	26.45	20.33	22.98	27.37
EOM	34.63	35.85	33.92	37.65	37.13	37.95	38.43	25.25	24.53	20.98	23.21	28.61

WTR YR 1986 HIGH 20.18 AUG 11 LOW 39.07 APR 20

592341135535501. Local number, CD02905601ABAA1001.
LOCATION.--Lat 59°23'41", long 135°53'55", Hydrologic Unit 19060000, on Tsirku Fan near Klukwan, 20 mi north of Haines. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of the Quaternary System
WELL CHARACTERISTICS.--Diameter 6 in, depth 260 ft, cased to 260 ft, open at bottom.
INSTRUMENTATION.--Digital recorder--1-hour punch.
DATUM.--Elevation of land-surface datum is 116.81 ft above National Geodetic Vertical Datum of 1929 (determined from levels survey). Measuring point: Inside of recorder housing 1.49 ft above land-surface datum.
REMARKS.--Missing record due to equipment malfunction.
PERIOD OF RECORD.--March 1983 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 1.99 ft below land-surface datum, Aug. 9, 1984; lowest, 13.84 ft below land-surface datum, Apr. 3, 7, and 8, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	7.32	11.01	10.21	10.61	12.24	---					---	5.13
10	8.00	10.99	10.67	11.08	12.26	---					---	5.52
15	8.50	11.01	11.24	11.38	12.34	---					---	6.23
20	9.10	10.68	10.90	11.70	12.37	---					---	6.90
25	9.67	10.76	9.62	12.08	11.81	---					---	7.17
EOM	10.33	10.97	9.99	12.24	11.30	---					4.48	8.12

WTR YR 1986 HIGH 4.27 AUG 30 LOW 12.48 FEB 19

CORDOVA

603228145442601. Local number, CC01500327BDCB1004 30023.
LOCATION.--Lat 60°32'28", long 145°44'26", Hydrologic Unit 19050003, Lefevre Street near west end of Eyak Lake, Cordova. Owner: City of Cordova.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 10 in, depth 82 ft, backfilled to 71 ft, screened 48.5 to 71 ft.
INSTRUMENTATION.--Continuous strip-chart recorder.
DATUM.--Elevation of land surface datum is 32 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of shelter floor 4.00 ft above land-surface datum.
REMARKS.--Water levels are affected by pumping of nearby wells.
PERIOD OF RECORD.--February 1973 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.60 ft below land-surface datum, Aug. 15, 16, 1981; lowest, 46.88 ft below land-surface datum, Dec. 28, 1975.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	8.50	11.12	11.95	7.05	8.64	11.33	---	9.56	9.01	10.02	8.43	8.60
10	8.05	11.59	10.04	8.55	8.18	11.38	---	8.75	9.21	10.03	7.25	8.77
15	9.33	11.32	9.47	7.88	9.39	10.85	---	8.99	9.48	9.68	7.52	9.75
20	9.60	11.62	7.50	9.26	10.31	10.80	---	8.97	10.07	10.10	9.34	9.15
25	10.33	11.78	6.30	9.31	10.56	10.87	10.52	9.59	9.87	8.41	9.27	9.31
EOM	10.87	11.97	8.95	8.59	10.90	---	10.23	10.18	10.13	9.23	7.78	10.21

WTR YR 1986 HIGH 5.95 DEC 24 LOW 12.03 DEC 7-8

VALDEZ

610745146105001. Local number, CC00800531DACC1001 40342.
LOCATION.--Lat 61°07'45", long 146°10'50", Hydrologic Unit 19050003, 2 mi east of Valdez airport. Owner: The Alpetco Company.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 6 in, depth 76 ft, sediment in well to about 75 ft.
INSTRUMENTATION.--Continuous strip-chart recorder.
DATUM.--Elevation of land surface datum is 154.8 ft above National Geodetic Vertical Datum of 1929 (determined from levels survey). Measuring point: Top of casing 4.00 ft above land-surface datum.
REMARKS.--Missing record January 17 to March 4 due to equipment malfunction.
PERIOD OF RECORD.--October 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.07 ft below land-surface datum, Aug. 17, 1981; lowest, well was dry during parts of January-May for period of record.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	50.92	55.16	63.64	59.87		72.14		---	56.30	52.06	51.31	52.54
10	51.83	56.30	65.57	59.70		73.27		---	55.46	51.74	51.60	53.23
15	51.90	57.41	66.79	60.51		74.42		---	54.64	51.68	51.28	53.78
20	52.95	59.13	67.73	---		---		62.77	53.76	51.53	51.65	54.31
25	54.02	60.59	64.44	---		---		60.06	52.91	50.97	52.29	54.17
EOM	54.62	62.12	60.42	---		---		57.69	52.53	50.88	52.08	55.09

WTR YR 1986 HIGH 50.42 OCT 1 LOW Dry between MAR 16 AND MAY 19

610645146105701. Local number, CC00900506CADA1001 40343.
LOCATION.--Lat 61°06'45", long 146°10'57", Hydrologic Unit 19050003, 2.2 mi southeast of Valdez airport. Owner: The Alpetco Company.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 6 in, hole depth 85 ft, cased to 56 ft. Well has caved below bottom of casing at 56 ft.
INSTRUMENTATION.--Continuous strip-chart recorder.
DATUM.--Elevation of land surface datum is 84.6 ft above National Geodetic Vertical Datum of 1929 (determined from levels survey). Measuring point: Top of casing 4.50 ft above land-surface datum.
REMARKS.--Missing record due to equipment malfunction.
PERIOD OF RECORD.--October 1979 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 0.27 ft above land-surface datum, Aug. 7, 1981; lowest recorded, 24.79 ft below land-surface datum, Apr. 16-19, 1983.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	4.71	5.52	9.25	5.67	11.10	---	---	18.09	5.23	4.62	4.67	4.71
10	4.35	5.81	10.23	6.13	11.06	14.88	---	12.43	5.15	4.71	4.38	4.80
15	4.84	6.23	10.73	6.90	12.00	15.68	---	6.80	4.98	4.69	4.47	5.00
20	5.06	6.90	11.27	7.74	---	16.44	20.82	5.71	4.82	4.68	4.79	4.50
25	5.27	7.65	6.97	8.73	---	17.21	21.27	5.56	4.91	4.41	4.91	4.95
EOM	5.39	8.47	6.17	9.97	---	18.11	20.29	5.28	4.84	4.60	4.53	5.15

WTR YR 1986 HIGH 4.23 AUG 28 LOW 21.63 APR 29

SOUTH-CENTRAL ALASKA

KENAI PENINSULA BOROUGH

600808149254802. Local number, SB00100134CADC2003 10782.
LOCATION.--Lat 60°07'52", long 149°25'56", Hydrologic Unit 19050003, at Fort Raymond Recreation Camp, near Seward. Owner: City of Seward.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 8 in, depth 141 ft, screen reportedly installed at bottom of well.
INSTRUMENTATION.--Continuous strip-chart recorder.
DATUM.--Elevation of land surface datum is 46 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of casing at land-surface datum.
REMARKS.--Water levels are affected by pumping of nearby wells. Missing record due to equipment malfunction.
PERIOD OF RECORD.--July to August 1964, October 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 13.07 ft below land-surface datum, Dec. 1, 1976; lowest, 27.72 ft below land-surface datum, Apr. 14, 1979.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	21.04	23.09	24.05	17.93	22.91			---	23.47	24.36	22.47	20.40
10	21.55	23.32	23.85	18.61	---			---	23.33	24.49	23.22	20.90
15	21.79	23.47	22.00	20.17	---			---	22.74	24.15	23.34	21.50
20	22.38	23.72	21.68	20.71	---			23.99	23.71	22.40	23.53	21.98
25	23.26	23.87	14.63	21.68	---			24.07	23.94	23.49	23.21	22.36
EOM	22.32	24.02	17.50	22.52	---			23.52	23.48	23.62	20.01	22.61

WTR YR 1986 HIGH 14.19 DEC 26 LOW 25.33 JUL 10

594019151351201. Local number, SC00601412CAAB10C1 11375.
LOCATION.--Lat 59°40'19", long 151°35'12", Hydrologic Unit 19050002, Pitzman Avenue on Diamond Ridge, Homer. Owner: Becky Fox-Krogstad.
AQUIFER.--Sandstone and conglomerate of the Tertiary System.
WELL CHARACTERISTICS.--Diameter 6 in, depth 56 ft, cased to 47.5 ft, backfilled with gravel to 49 ft.
INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey personnel.
DATUM.--Elevation of land surface datum is 1,150 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of casing 2.00 ft above land-surface datum.
REMARKS.--Water is pumped from the well for domestic uses.
PERIOD OF RECORD.--June 1978 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 6.57 ft below land-surface datum, May 8, 1979; lowest measured, 11.74 ft below land-surface datum, Mar. 16, 1983.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 04	11.28	FEB 04	10.95	MAY 01	9.48	JUN 25	10.69	AUG 13	11.15

594515151492201. Local number, SC00501510CCAC1001 10003.
LOCATION.--Lat 59°45'15", long 151°49'22", Hydrologic Unit 19050002, mile 161, Old Sterling Highway, near Anchor Point. Owner: Raymond Williams.
AQUIFER.--Sand and gravel of the Quaternary or Tertiary System.
WELL CHARACTERISTICS.--Diameter 6 in, depth 100 ft, perforated 91 to 100 ft.
INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey personnel.
DATUM.--Elevation of land surface datum is 240 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of casing plate 4.80 ft below land-surface datum.
REMARKS.--Water is pumped from the well for domestic uses.
PERIOD OF RECORD.--May 1962 to September 1970, May 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 35.85 ft below land-surface datum, May 31, 1963; lowest measured, 47.89 ft below land-surface datum, June 20, 1964.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
DEC 05	36.60	FEB 05	37.95	APR 03	37.99	MAY 01	36.39	JUN 24	38.59	AUG 13	38.33

602926151042201. Local number, SB00501029CDAC1001 10001.
LOCATION.--Lat 60°29'26", long 151°04'22", Hydrologic Unit 19050002, Mt. Redoubt Way, Soldotna. Owner: Charles S. Parker.
AQUIFER.--Gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 8 in, depth 100 ft, cased to 100 ft, perforated 81 to 97 ft.
INSTRUMENTATION.--Continuous strip-chart recorder.
DATUM.--Elevation of land surface datum is 94 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Shelter floor at top of casing 3.00 ft above land-surface datum.
PERIOD OF RECORD.--March 1963 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 2.38 ft below land-surface datum, June 28, 1963; lowest, 15.36 ft below land-surface datum, May 29, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	6.84	5.46	7.17	8.30	7.14	7.15	7.26	12.74	10.79	9.33	8.22	7.01
10	6.47	5.07	7.32	7.22	7.05	7.07	9.69	12.15	11.16	9.09	7.20	7.14
15	6.60	6.91	7.26	6.90	7.08	7.36	9.62	9.97	9.79	7.88	8.54	7.12
20	6.74	7.40	7.19	6.89	7.13	7.15	8.64	10.38	9.23	9.39	8.46	6.96
25	6.91	7.31	8.07	6.95	6.78	7.36	11.72	10.67	8.94	9.16	7.01	7.04
EOM	6.88	7.36	8.45	6.89	6.73	7.35	12.20	12.11	8.98	8.86	7.06	8.76

WTR YR 1986 HIGH 5.07 NOV 10-13 LOW 15.36 MAY 29

KENAI PENINSULA BOROUGH--Continued

603846151002701. Local number, SB00601003ABAC1001 10646.
LOCATION.--Lat 60°38'46", long 151°00'27", Hydrologic Unit 19050002, Marathon Oil Well Road in Beaver Creek basin, Kenai area. Owner: Marathon Oil.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 6 in, depth 65 ft, cased to 65 ft.
INSTRUMENTATION.--Digital recorder--30-minute punch.
DATUM.--Elevation of land surface datum is 150 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of casing 1.30 ft above land-surface datum.
REMARKS.--Missing record due to equipment malfunction.
PERIOD OF RECORD.--August 1968 to November 1973, April 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.66 ft below land-surface datum, Nov. 15, 16, 1979; lowest, 14.26 ft below land-surface datum, Apr. 4, 1969.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---	10.64	10.51	11.01	11.27	11.50	11.34	11.32	11.36	11.25	10.69
10		---	10.70	10.58	11.02	11.34	11.60	11.20	11.35	11.35	11.26	10.72
15		---	10.69	10.69	11.02	11.44	11.50	11.01	11.38	11.39	11.21	10.60
20		10.52	10.68	10.78	11.08	11.46	11.30	11.09	11.38	11.37	11.08	10.53
25		10.57	10.60	10.83	11.13	11.48	11.26	11.17	11.40	11.36	11.12	10.23
EOM		10.64	10.56	10.90	11.19	11.56	11.32	11.28	11.44	11.20	10.86	10.23

WTR YR 1986 HIGH 10.23 SEP 25-30 LOW 11.65 APR 9 AND 11

604038151204303. Local number, SB00701223CCDB3008 10004.
LOCATION.--Lat 60°40'38", long 151°20'43", Hydrologic Unit 19050002, mile 1, Miller Loop Road, North Kenai. Owner: Union Chemical Company.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 6 in, depth 112 ft, screened 106 to 110 ft.
INSTRUMENTATION.--Continuous strip-chart recorder.
DATUM.--Elevation of land surface datum is 129.7 ft above National Geodetic Vertical Datum of 1929 (determined from levels survey). Measuring point: Top of casing 2.00 ft above land-surface datum.
REMARKS.--Water levels are affected by pumping of nearby wells. Well is also known as Union Chemical 5B.
PERIOD OF RECORD.--December 1967 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 46.52 ft below land-surface datum, Feb. 7, 1968; lowest, 65.94 ft below land-surface datum, June 16, 1978.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	57.75	58.50	58.29	56.26	56.56	55.51	56.62	57.12	57.70	57.90	58.30	58.57
10	57.76	57.86	57.37	57.31	57.98	55.25	56.74	---	58.36	57.71	58.80	58.21
15	58.10	57.72	57.49	57.14	56.50	55.56	56.81	57.04	57.99	57.69	58.31	58.20
20	57.73	57.85	57.44	56.56	55.79	55.67	57.50	56.89	57.57	57.19	58.41	57.90
25	57.96	57.16	56.92	56.97	55.45	55.73	57.67	56.56	57.22	57.72	58.65	58.11
EOM	57.72	57.14	56.71	57.14	55.21	55.96	58.11	57.94	57.81	58.21	59.07	58.27

WTR YR 1986 HIGH 55.06 OCT 8 LOW 59.60 AUG 31

604133151214803. Local number, SB00701215DCBC3004 11216.
LOCATION.--Lat 60°41'33", long 151°21'48", Hydrologic Unit 19050002, Bernice Lake campground, North Kenai. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 6 in, depth 52.4 ft, cased to 52.4 ft.
INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey personnel.
DATUM.--Elevation of land surface datum is 84.6 ft above National Geodetic Vertical Datum of 1929 (determined from levels survey). Measuring point: Top of plate 2.02 ft above land-surface datum.
REMARKS.--Well is 4 ft east of well SB00701215DCBC2004 10941.
PERIOD OF RECORD.--June 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 7.74 ft below land-surface datum, Dec. 2, 1980; lowest measured, 13.88 ft below land-surface datum, Jan. 22, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
NOV 20	12.30	JAN 09	11.90	FEB 27	12.21	MAY 13	11.78	JUL 16	12.53

604133151214802. Local number, SB00701215DCBC2004 10941.
LOCATION.--Lat 60°41'33", long 151°21'48", Hydrologic Unit 19050002, Bernice Lake campground, North Kenai. Owner: State of Alaska.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 6 in, depth 202 ft, cased to 191 ft, screened 191 to 196 ft.
INSTRUMENTATION.--Digital recorder--30-minute punch.
DATUM.--Elevation of land surface datum is 84.6 ft above National Geodetic Vertical Datum of 1929 (determined from levels survey). Measuring point: Top of floor 2.07 ft above land-surface datum.
REMARKS.--Missing record due to equipment malfunction.
PERIOD OF RECORD.--June 1972 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 8.23 ft below land-surface datum, Nov. 3, 1980; lowest, 14.84 ft below land-surface datum, Apr. 18 and 19, 1985.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	13.13	---	12.83	12.49	12.72	12.85	13.01	12.81	12.13	12.87	13.35	13.33
10	---	---	12.94	12.49	12.71	12.85	13.10	12.47	12.27	12.94	13.39	13.29
15	---	---	12.82	12.55	12.70	12.94	13.10	12.20	12.41	13.04	13.44	13.27
20	---	12.90	12.82	12.56	12.69	12.93	13.02	12.03	12.49	13.22	13.47	13.20
25	---	12.84	12.60	12.54	12.72	12.97	12.94	11.92	12.69	13.19	13.50	13.09
EOM	---	12.85	12.49	12.51	12.75	13.03	12.94	11.99	12.78	13.28	13.35	13.04

WTR YR 1986 HIGH 11.92 MAY 24-25 LOW 13.56 AUG 22

610647151153001. Local number, SB01201120DBDD1001 21426.
LOCATION.--Lat 61°06'47", long 151°15'30", Hydrologic Unit 19050002, 4 mi northwest of Tyonek. Owner: U.S. Geological Survey.
AQUIFER.--Claystone and coal of Tertiary System.
WELL CHARACTERISTICS.--Hole depth 320 ft, 6 in steel casing to 43 ft, 4 in plastic pipe to 206 ft, perforated 106 to 206 ft, clay plug in pipe 194 to 206 ft.
INSTRUMENTATION.--Continuous strip-chart recorder.
DATUM.--Elevation of land surface datum is 210 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of 4 in plastic pipe 2.50 ft above land-surface datum.
PERIOD OF RECORD.--December 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 19.94 ft below land-surface datum. Aug. 30 and 31, 1986; lowest, 32.44 ft below land-surface datum, July 30 and 31, 1980.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	24.22	25.39	26.73	24.85	26.67	28.03	28.93	22.29	22.11	21.79	22.03	20.59
10	26.01	26.10	26.51	26.21	26.70	28.02	28.87	22.12	22.29	21.79	21.79	20.69
15	24.55	26.52	25.88	24.80	27.36	28.18	28.59	21.78	22.85	22.05	20.74	21.19
20	25.50	26.08	25.76	26.23	25.94	28.65	23.56	21.71	21.39	22.78	21.01	21.67
25	25.50	26.27	23.94	26.82	27.72	28.99	22.56	21.94	22.12	24.10	21.13	20.77
EOM	24.93	26.59	24.02	24.80	27.75	29.05	22.39	22.11	21.70	22.54	19.94	21.16

WTR YR 1986 HIGH 19.94 AUG 30-31 LOW 29.08 APR 4

611049149545101. Local number, SB01300436BAAC1041 02368.
LOCATION.--Lat 61°10'49", long 149°54'51", Hydrologic Unit 19050002, Harding Drive and 45th Street, Anchorage. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 6 in, depth 18.5 ft, screened 13.5 to 18.5 ft.
INSTRUMENTATION.--Monthly measurement with chalked steel tape by U.S. Geological Survey personnel.
DATUM.--Elevation of land surface datum is 88 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of casing cap 2.50 ft above land-surface datum.
PERIOD OF RECORD.--June 1974 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 11.50 ft below land-surface datum, Oct. 21, 1980; lowest measured, 14.39 ft below land-surface datum, Mar. 23, 1984.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 24	12.56	DEC 23	13.03	FEB 24	13.49	APR 24	13.22	JUN 25	13.27	AUG 25	13.17
NOV 21	12.86	JAN 24	13.30	MAR 25	13.41	MAY 22	13.15	JUL 24	13.32	SEP 24	13.00

MUNICIPALITY OF ANCHORAGE

611311149510401. Local number, SB01300317BDAD1003 00114.
LOCATION.--Lat 61°13'11", long 149°51'04", Hydrologic Unit 19050002, near Municipality of Anchorage's public-water supply well number 3, East 3rd Avenue and Concrete Street, Anchorage. Owner: Municipality of Anchorage.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 8 in, depth 230 ft, slotted 162 to 182 ft and 190 to 201 ft.
INSTRUMENTATION.--Monthly measurement with chalked steel tape or electric tape by U.S. Geological Survey personnel.
DATUM.--Elevation of land surface datum is 129.3 ft above National Geodetic Vertical Datum of 1929 (determined by levels survey). Measuring point: Top of coupling on casing cap 2.66 ft above land-surface datum.
REMARKS.--Water levels are affected by pumping of nearby wells. Datum was established prior to the 1964 earthquake; no adjustments have been determined.
PERIOD OF RECORD.--October 1956 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 28.88 ft below land-surface datum, Nov. 29, 1957; lowest measured, 128.17 ft below land-surface datum, Apr. 19, 1976.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 23	97.73	DEC 20	106.44	FEB 25	90.50	APR 23	61.30	JUN 24	52.66	AUG 21	50.28
NOV 21	51.49	JAN 23	104.09	MAR 24	73.91	MAY 22	99.72	JUL 24	51.0	SEP 23	53.10

MUNICIPALITY OF ANCHORAGE--Continued

611444149415401. Local number, SB01300206DBBA1004 00017.
LOCATION.--Lat 61°14'44", Long 149°41'54", Hydrologic Unit 19050002, Arctic Valley Road, Fort Richardson. Owner: U.S. Geological Survey.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 6 in, depth 670 ft, cased to 134 ft, backfilled with gravel to 134 ft and plugged, perforated 90 to 120 ft and 130 to 134 ft.
INSTRUMENTATION.--Digital recorder--30-minute punch.
DATUM.--Elevation of land surface datum is 294 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of shelter floor 1.95 ft above land-surface datum.
REMARKS.--Water levels are affected by pumping of nearby wells.
PERIOD OF RECORD.--August 1954 to June 1962, September 1966 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level, 42.15 ft below land-surface datum, Oct. 28, 1960; lowest, 70.84 ft below land-surface datum, May 9 and 10, 1986.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	63.99	63.93	63.52	65.28	67.83	68.83	68.94	70.59	68.77	67.40	66.50	67.04
10	63.11	63.43	64.39	65.70	68.03	67.99	69.71	70.77	68.67	67.10	66.19	67.20
15	63.13	63.58	64.51	66.35	68.01	67.99	69.51	69.99	68.07	67.26	66.29	67.11
20	62.92	63.62	64.48	66.76	68.13	67.97	69.57	69.66	68.04	66.94	66.62	67.03
25	63.60	63.24	65.29	66.97	68.01	68.82	70.02	69.27	68.00	66.75	66.05	66.76
EOM	63.84	63.02	64.89	66.01	68.46	69.56	70.47	69.37	67.39	66.69	66.71	66.34

WTR YR 1986 HIGH 62.81 OCT 9 LOW 70.84 MAY 9-10

MATANUSKA-SUSITNA BOROUGH

613417149065401. Local number, SA01700209CCCB1009 20004.
LOCATION.--Lat 61°34'20", long 149°06'50", Hydrologic Unit 19050002, Springer Road, 2 mi south of Palmer. Owner: Glenn Woods.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Diameter 4 in, depth 83 ft, cased to 82 ft, slotted at bottom.
INSTRUMENTATION.--Monthly measurement with chalked steel tape by U.S. Geological Survey personnel.
DATUM.--Elevation of land surface datum is 170 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of casing 0.50 ft above land-surface datum.
PERIOD OF RECORD.--July 1949 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 69.58 ft below land-surface datum, July 29, 1964; lowest measured, 77.36 ft below land-surface datum, Mar. 26, 1975.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	72.29	NOV 22	71.91	JAN 24	72.08	MAR 28	72.49	APR 25	72.53	JUL 30	71.73
28	72.52	DEC 19	71.87	FEB 26	72.03						

613403149151001. Local number, SA01700115BDAB1003 20011.
LOCATION.--Lat 61°34'03", long 149°15'10", Hydrologic Unit 19050002, University of Alaska Agricultural Experiment Station, 5 mi southwest of Palmer. Owner: University of Alaska.
AQUIFER.--Sand and gravel of the Quaternary System.
WELL CHARACTERISTICS.--Depth 40 ft, diameter unknown.
INSTRUMENTATION.--Monthly measurement with chalked steel tape by U.S. Geological Survey personnel.
DATUM.--Elevation of land surface datum is 173 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of wooden well cover 1.00 ft above land-surface datum.
PERIOD OF RECORD.--December 1955 to August 1974, March 1977 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 25.61 ft below land-surface datum, July 10, 1956; lowest measured, 29.75 ft below land-surface datum, Feb. 5, 1971.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	26.58	NOV 22	26.68	JAN 24	26.71	APR 25	26.78	JUL 30	26.77	SEP 29	26.82
28	26.61	DEC 19	26.63	FEB 26	26.74						

SOUTH-CENTRAL ALASKA

MATANUSKA-SUSITNA BOROUGH--Continued

613406149152103. Local number, SA01700115BACD3004 20013.

LOCATION.--Lat 61°34'06", long 149°15'21", Hydrologic Unit 19050002, University of Alaska Agricultural Experiment Station, 5 mi southwest of Palmer. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 6 in, depth 313 ft, cased to 313 ft.

INSTRUMENTATION.--Digital recorder--30-minute punch.

DATUM.--Elevation of land surface datum is 172 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of casing 1.50 ft above land-surface datum.

REMARKS.--Missing record due to equipment malfunction.

PERIOD OF RECORD.--September 1955 to August 1974, February 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, 5.42 ft below land-surface datum, June 28, 1962; lowest, 31.50 ft below land-surface datum, Apr. 1, 1964.

WATER LEVEL, IN FEET BELOW LAND-SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	15.94	15.90	---	15.41	16.00	15.85	15.98	16.54	16.51		---	---
10	15.46	15.73	---	15.49	15.81	15.75	16.35	16.58	18.77		---	---
15	15.67	15.79	---	15.68	15.81	16.07	16.19	16.59	---		---	---
20	15.60	15.83	---	15.76	15.75	16.03	16.13	16.54	---		---	---
25	15.70	---	15.78	15.75	15.31	15.98	16.35	16.76	---		---	---
EOM	15.77	---	15.65	15.63	15.64	16.21	16.58	16.40	---		16.37	17.02

WTR YR 1986 HIGH 15.31 FEB 25 LOW 18.90 JUN 9

613406149152102. Local number, SA01700115BACD2004 20014.

LOCATION.--Lat 61°34'06", long 149°15'21", Hydrologic Unit 19050002, University of Alaska Agricultural Experiment Station, 5 mi southwest of Palmer. Owner: U.S. Geological Survey.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Depth 259 ft, 6 in casing to 49 ft, 4 in casing from 29 ft to unknown depth, perforated 155.5 to 156.5 ft.

INSTRUMENTATION.--Monthly measurement with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface datum is 172 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of 8 in casing 3.50 ft above land-surface datum.

PERIOD OF RECORD.--September 1955 to August 1974, February 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level, flowing over top of casing (3.5 ft above land-surface datum), Aug. 1962 to Mar. 1964; lowest measured, 2.33 ft below land-surface datum, July 26, 1979.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	1.48	NOV 22	1.69	JAN 24	1.59	APR 25	1.48	JUL 30	1.98	SEP 29	2.03
25	1.59	DEC 19	1.50	MAR 28	1.26						

614147150013801. Local number, SB01900432ADBD1001 21100.

LOCATION.--Lat 61°41'47", long 150°01'38", Hydrologic Unit 19050002, northwest corner of Nancy Lake Recreation maintenance facility, 3 mi south of Willow. Owner: State of Alaska.

AQUIFER.--Sand and gravel of the Quaternary System.

WELL CHARACTERISTICS.--Diameter 6 in, depth 69 ft, screened 64 to 69 ft.

INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey personnel.

DATUM.--Elevation of land surface datum is 260 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of casing 1.00 ft above land-surface datum.

REMARKS.--Water is pumped from the well for institutional uses.

PERIOD OF RECORD.--March 1977 to current year.

EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 46.89 ft below land-surface datum, Oct. 15, 1980; lowest measured, 50.61 ft below land-surface datum, Apr. 23, 1985.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 11	48.91	DEC 11	48.38	MAR 19	49.14	MAY 11	49.49	JUL 21	49.70

YUKON ALASKA

FAIRBANKS NORTH STAR BOROUGH

644400147151501. Local number, FD00200224ABBB1001 51659.
LOCATION.--Lat 64°44'00", long 147°15'15", Hydrologic Unit 19030004, in road right-of-way at intersection of Nelson and Laurence Roads near North Pole, Alaska. Owner: U.S. Army Corps of Engineers.
AQUIFER.--Chena Alluvium of Quaternary Age.
WELL CHARACTERISTICS.--Diameter 4 in, depth 40 ft, casing information not available.
INSTRUMENTATION.--Strip-chart recorder from June 1976 to May 1980. Digital recorder--1-hour punch, from November 1983 to current year.
DATUM.--Elevation of land-surface datum is 503.5 ft above National Geodetic Vertical Datum of 1929 (determined by levels survey). Measuring point: Top of casing 2.97 ft above land-surface datum.
REMARKS.--Observation well drilled by the U.S. Army Corps of Engineers.
PERIOD OF RECORD.--June 1976 to May 1980; November 1983 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 8.05 ft below land-surface datum, May 31, 1985; lowest water level measured, 13.65 ft below land-surface datum, Apr. 14, 1978.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	10.80	11.34	11.89	12.31	12.67	12.70	12.93	12.65	12.61	12.43	11.58	10.96
10	10.85	11.43	11.96	12.35	12.70	12.70	12.93	12.60	12.61	12.35	11.54	10.99
15	10.88	11.54	12.04	12.44	12.70	12.70	12.93	12.61	12.61	12.26	11.54	11.08
20	10.99	11.63	12.11	12.49	12.70	12.93	12.93	12.62	12.61	12.16	11.62	11.17
25	11.14	11.71	12.19	12.55	12.70	12.93	12.88	12.62	12.58	11.95	11.45	11.28
EOM	11.24	11.80	12.25	12.63	12.70	12.93	12.72	12.62	12.47	11.69	11.04	11.38

WTR YR 1986 HIGH 10.78 OCT 3 LOW 12.93 MAR 20 TO APR 21

644944147402501. Local number, FC00100113BCCC1022 50006
LOCATION.--Lat 64°49'44", long 147°40'25", Hydrologic Unit 19030004, at former building site 4005, Fort Wainwright. Owner: U.S. Army.
AQUIFER.--Chena Alluvium of Quaternary Age.
WELL CHARACTERISTICS.--Diameter 8 in, depth 113 ft, cased to 100 ft, screened from 100 ft to 113 ft.
INSTRUMENTATION.--Strip-chart recorder from March 1976 to November 1983. Digital recorder--1-hour punch, from November 1983 to current year.
DATUM.--Elevation of land-surface datum is 442.80 ft above National Geodetic Vertical Datum of 1929 (determined by levels survey). Measuring point: Top of casing 1.50 ft above land-surface datum.
REMARKS.--Observation well drilled by the U.S. Army.
PERIOD OF RECORD.--August 1964 to June 1970; March 1976 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 3.67 ft above land-surface datum, Aug. 15, 1967 due to flooding; lowest water level measured, 16.13 ft below land-surface datum, Apr. 7, 1969.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	12.21	12.92	13.51	13.88	14.39	14.69	15.03	14.96	14.10	13.97	12.93	12.50
10	12.42	12.94	13.60	13.97	14.46	14.74	15.10	14.64	14.19	14.12	13.16	12.83
15	12.52	13.17	13.65	14.05	14.53	14.81	15.15	14.42	14.01	14.18	13.42	13.01
20	12.71	13.30	13.69	14.15	14.57	14.87	15.22	14.34	14.22	14.12	13.60	13.17
25	13.09	13.37	13.76	14.23	14.60	14.93	15.28	14.20	14.09	13.11	12.55	13.29
EOM	13.10	13.44	13.82	14.31	14.63	14.96	15.25	14.21	13.73	12.74	12.21	13.43

WTR YR 1986 HIGH 12.10 OCT 1-3 LOW 15.29 APR 26-28

645434147385101. Local number, FB00100113DDBC2001 50673.
LOCATION.--Lat°64 54'34", long 147°38'51", Hydrologic Unit 19030004, in road right-of-way at 2.3 mi McGrath Road, off Farmers' Loop Road near Fairbanks. Owner: U.S. Geological Survey.
AQUIFER.--Quartz-mica schist of pre-Jurassic age.
WELL CHARACTERISTICS.--Diameter 6 in, depth 100 ft, cased to 98.5 ft, perforated openings from 88.5 ft to 98.5 ft, and open hole to 100 ft.
INSTRUMENTATION.--Digital recorder--1-hour punch, installed October 1983.
DATUM.--Elevation of land-surface datum is 740 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of casing 1.00 ft above land-surface datum.
REMARKS.--Observation well drilled by the U.S. Geological Survey, replaces old McGrath Estates well, 645429147383801.
PERIOD OF RECORD.--June 1983 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 39.13 ft below land-surface datum, Oct. 28, 1983; lowest water level measured 42.20 ft below land-surface datum, July 4, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5	40.46	40.25	40.37	40.75	41.10	41.24	41.29	41.64	41.62	41.98	41.63	41.41
10	40.24	40.33	40.75	40.77	41.10	41.21	41.50	41.55	41.66	41.73	41.46	41.47
15	40.13	40.59	40.88	40.85	41.05	41.35	41.44	41.54	41.59	41.74	41.59	41.28
20	40.13	40.58	40.70	40.92	41.03	41.29	41.51	41.62	41.70	41.67	41.58	41.15
25	40.30	40.50	40.95	40.92	40.99	41.26	41.59	41.54	41.73	41.68	41.50	41.31
EOM	40.28	40.51	40.75	40.78	41.09	41.54	41.64	41.61	41.72	41.64	41.41	41.30

WTR YR 1986 HIGH 40.12 OCT 16 LOW 41.98 JUL 5

YUKON ALASKA

FAIRBANKS NORTH STAR BOROUGH--Continued

645442147461601. Local number, FB00100117DDAB1001 50176.
LOCATION.--Lat 64°54'38", long 147°46'45", Hydrologic Unit 19030004, 1.4 mi northwest of intersection of Farmers Loop Road and Ski Boot Hill Road, near Fairbanks. Owner: U.S. Geological Survey.
AQUIFER.--Quartz-mica schist of pre-Jurassic age.
WELL CHARACTERISTICS.--Diameter 6 in, depth 565 ft, cased to 370 ft, and open hole to 565 ft.
INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. Geological Survey personnel from June 1975 to September 1979. Continuous strip-chart recorder from October 1979 to November 1985. Digital recorder--1-hour punch, from November 1985 to current year.
DATUM.--Elevation of land-surface datum is 1,282.92 ft above National Geodetic Vertical Datum of 1929 (determined by levels survey). Measuring point: Top of casing 1.98 ft above land-surface datum.
REMARKS.--Water levels prior to 1980 were published in feet above National Geodetic Vertical Datum.
PERIOD OF RECORD.--May 1975 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 473.53 ft below land-surface datum, May 28, 1975; lowest water level measured, 502.10 ft below land-surface datum August 10, 1984 and others.

WATER LEVEL, IN FEET LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986
MINIMUM VALUES

DAY	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP
5		---	500.55	500.45	500.47	500.16	499.79	499.80	499.78	499.75	499.73	499.84
10		---	500.78	500.40	500.43	500.00	500.07	499.79	499.77	499.75	499.68	499.84
15		500.88	500.67	500.38	500.26	500.07	499.97	499.79	499.77	499.74	499.84	499.75
20		500.99	500.54	500.45	500.12	500.00	499.77	499.79	499.77	499.74	499.86	499.53
25		500.80	500.83	500.40	499.98	499.93	499.82	499.78	499.76	499.74	499.65	499.76
EOM		500.77	500.56	500.17	500.05	500.07	499.85	499.78	499.75	499.73	499.72	---

WTR YR 1986 HIGH 499.45 SEP 8 LOW 500.99 NOV 18-20

DENALI NATIONAL PARK
(Formerly McKinley Park)

634355148550501. Local number, FC01400704BDAB1002 50002.
LOCATION.--Lat 63°43'55", long 148°55'05", Hydrologic Unit 19030004, near Denali National Park Hotel. Owner: U.S. National Park Service.
AQUIFER.--Fractured schist of Precambrian Era.
WELL CHARACTERISTICS.--Diameter 8 in, depth 307 ft, cased to 304 ft, perforated 150 to 199.5 ft.
INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. National Park Service personnel.
DATUM.--Elevation of land surface datum is 1,750 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of casing 2.50 ft above land-surface datum.
PERIOD OF RECORD.--June 1965 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 89.26 ft below land-surface datum, Oct. 4, 1969; lowest measured, 101.82 ft below land-surface datum, Aug. 4, 1986.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	95.70	OCT 27	95.78	MAY 06	99.27	JUN 09	99.67	JUL 05	98.21	AUG 18	96.43
12	95.75	APR 15	98.80	16	99.45	16	99.10	22	97.50	SEP 05	95.73
15	95.75	21	98.93	30	99.68	27	98.49	AUG 04	101.82	15	95.52
20	95.76	MAY 02	100.11								

634359148545401. Local number, FC01400704ABCC1001 50001.
LOCATION.--Lat 63°43'59", long 148°54'54", Hydrologic Unit 19030004, near Denali National Park Hotel. Owner: U.S. National Park Service.
AQUIFER.--Fractured schist of Precambrian era.
WELL CHARACTERISTICS.--Diameter 8 in, depth 253 ft, cased to 204 ft.
INSTRUMENTATION.--Intermittent measurements with chalked steel tape by U.S. National Park Service personnel.
DATUM.--Elevation of land surface datum is 1,750 ft above National Geodetic Vertical Datum of 1929 (determined from topographic map). Measuring point: Top of casing 2.50 ft above land-surface datum.
PERIOD OF RECORD.--1964 to current year.
EXTREMES FOR PERIOD OF RECORD.--Highest water level measured, 81.33 ft below land-surface datum, June 2, 1980; lowest recorded, 110.03 ft below land-surface datum, Apr. 11, 1966.

WATER LEVEL, IN FEET BELOW LAND SURFACE DATUM, WATER YEAR OCTOBER 1985 TO SEPTEMBER 1986

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
OCT 01	95.25	DEC 09	95.38	FEB 10	96.29	MAR 24	97.69	MAY 06	98.93	JUL 05	98.99
12	95.26	16	95.24	21	96.72	31	98.01	16	98.99	22	97.92
15	95.18	30	95.46	28	96.84	APR 07	98.27	30	99.47	AUG 04	101.80
20	95.25	JAN 24	96.32	MAR 04	97.18	15	98.45	JUN 09	99.50	18	96.34
27	95.28	27	96.48	11	97.26	21	98.58	16	99.43	SEP 05	95.24
NOV 25	95.15	FEB 07	96.47	17	98.01	MAY 02	98.84	27	99.17	15	94.95
DEC 02	95.10										

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA

GIRDWOOD AREA WELLS

STATION NUMBER	LOCAL IDENT-I-FIER		DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN) (72004)
605655149100401	SA01000219BAAC1	004	06-20-86	0910	2.34	20.50	30
			08-28-86	1110	1.75	20.50	35

DATE	SAMPLE SOURCE (72005)	SAM-PLING CONDI-TION (72006)	SAMPLE TREAT-MENT (00115)	FLOW RATE, INSTAN-TANEOUS (GPM) (00059)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)
06-20-86	[1]26	[2]1.00	[3]1	3.0	99	6.30	2.5	<1
08-28-86	26	1.00	1	1.0	130	6.10	5.0	<1

DATE	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
06-20-86	50	49	59	0	1.6	<0.010	<0.100	<0.010
08-28-86	60	58	71	0	1.6	<0.010	<0.100	<0.010

[1] PUMP
[2] TESTING
[3] RAW

QUALITY OF GROUND WATER

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE AREA WELLS

STATION NUMBER	LOCAL IDENT-I-FIER		DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN) (72004)	SAMPLE SOURCE (72005)	SAM-PLING CONDI-TION (72006)	SAMPLE TREAT-MENT (00115)
610324149460401	SB01100311CBDB2	011	06-23-86	0840	1.49	20.50	33	1/26	2/1.00	3/1
			08-19-86	0855	4.26	20.50	40	26	1.00	1
610413149432301	SB01100301DBDC2	007	06-24-86	1000	1.41	20.50	25	26	1.00	1
			08-13-86	1300	-1.02	20.50	30	26	1.00	1
610430149475201	SB01100303BCAC1	029	11-13-85	1200	--	20.00	35	--	1.00	1
			05-08-86	1020	7.10	20.00	40	26	1.00	1
			08-14-86	1300	6.05	20.00	60	26	1.00	1
610440149424401	SB01100206BBCB1	006	05-07-86	0915	5.52	20.00	11	26	1.00	1
			08-13-86	1440	5.10	20.00	35	26	1.00	1
610450149461801	SB01200335CCCC1	047	06-23-86	1015	0.51	20.50	25	26	1.00	1
			08-14-86	1430	-0.2	20.50	30	26	1.00	1
610514149473901	SB01200334CAAC2	053	08-18-86	1000	0.95	18.50	45	26	1.00	1
610521149480601	SB01200334BCBC4	034	05-07-86	1310	8.30	20.50	35	26	1.00	1
			08-18-86	0840	4.21	20.50	40	26	1.00	1
610540149445701	SB01200335AABB1	045	11-12-85	1500	--	20.50	45	--	1.00	1
			06-24-86	1100	6.20	20.50	25	26	1.00	1
			08-15-86	0830	10.89	20.50	45	26	1.00	1
610555149434101	SB01200325CADD1	058	06-24-86	0820	0.36	20.50	20	26	1.00	1
			08-15-86	1130	0.40	20.50	20	26	1.00	1
610555149443801	SB01200326DADD2	065	11-12-85	1645	--	20.50	40	--	1.00	1
			05-06-86	1350	7.94	20.50	25	26	1.00	1
			08-15-86	1000	8.30	20.50	30	26	1.00	1
610603149435601	SB01200325CABD2	041	05-06-86	1130	11.31	20.50	15	26	1.00	1
			08-19-86	1030	7.19	20.50	35	26	1.00	1
610652149491101	SB01200321CADB1	059	11-13-85	1510	--	20.50	52	--	1.00	1
			05-07-86	1510	5.15	20.50	35	26	1.00	1
			08-14-86	0845	4.42	20.50	45	26	1.00	1
610657149430901	SB01200324DABB1	081	08-13-86	1040	13.08	20.50	35	26	1.00	1
610709149433701	SB01200324ACBB3	035	11-12-85	1400	--	20.50	110	--	1.00	1
			05-06-86	0945	14.02	20.50	15	26	1.00	1
			08-15-86	1400	13.51	20.50	30	26	1.00	1
610740149471401	SB01200315CADD2	045	05-05-86	1340	7.01	20.50	30	26	1.00	1
			08-12-86	1440	7.96	20.50	40	26	1.00	1
610754149453801	SB01200314BDCA1	064	05-05-86	1100	13.01	20.50	11	26	1.00	1
			08-13-86	0910	12.41	20.50	30	26	1.00	1
610801149465501	SB01200315ACAB1	002	06-23-86	1415	2.01	20.50	25	26	1.00	1
			08-12-86	1600	1.34	20.50	30	26	1.00	1
611154149434301	SB01300324DCBD1	005	06-20-86	1410	1.24	20.50	45	26	1.00	1
			08-19-86	1245	2.01	20.50	35	26	1.00	1

1/ PUMP
2/ TESTING
3/ RAW

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE AREA WELLS--Continued

STATION NUMBER	DATE	FLOW RATE, INSTANTANEOUS (GPM) (00059)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)	COLIFORM, FECAL, 0.7 UM-MF (COLS./100 ML) (31625)	ALKALINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKALINITY, CARBONATE IT-FLD (MG/L - CACO3) (99430)	BICARBONATE IT-FLD (MG/L AS HCO3) (99440)	CARBONATE IT-FLD (MG/L AS CO3) (99445)
610324149460401	06-23-86	0.4	370	7.20	4.0	<4	166	167	204	0
	08-19-86	0.5	349	6.60	6.0	<4	146	145	176	0
610413149432301	06-24-86	0.3	182	7.30	4.0	<1	85	85	103	0
	08-13-86	0.3	--	7.20	3.5	<1	82	83	101	0
610430149475201	11-13-85	0.2	288	--	4.0	--	--	--	--	--
	05-08-86	0.5	344	6.60	2.0	<1	128	128	156	0
	08-14-86	1.0	376	6.30	9.0	<1	154	152	185	0
610440149424401	05-07-86	1.0	208	6.90	2.5	<1	115	114	139	0
	08-13-86	0.3	--	6.40	5.0	<2	90	90	110	0
610450149461801	06-23-86	0.3	250	7.20	3.5	<2	135	134	163	0
	08-14-86	0.2	272	7.80	3.0	<2	128	128	156	0
610514149473901	08-18-86	0.2	290	7.00	4.5	<5	156	157	191	0
610521149480601	05-07-86	1.0	183	6.20	2.0	<1	70	70	85	0
	08-18-86	1.0	246	5.80	2.5	<1	72	71	87	0
610540149445701	11-12-85	--	460	--	4.0	--	--	--	--	--
	06-24-86	0.2	595	6.70	4.5	>550	287	290	353	0
	08-15-86	0.2	670	6.60	5.5	>600	324	327	399	0
610555149434101	06-24-86	3.0	268	6.40	3.5	<5	132	131	160	0
	08-15-86	1.0	380	6.40	7.0	K11	189	190	232	0
610555149443801	11-12-85	0.4	345	--	3.5	--	--	--	--	--
	05-06-86	1.0	360	7.10	3.0	<1	147	149	181	0
	08-15-86	0.5	480	6.50	5.0	K1	194	195	238	0
610603149435601	05-06-86	1.0	505	6.60	3.0	<5	216	213	260	0
	08-19-86	0.3	745	6.40	5.0	<10	331	334	407	0
610652149491101	11-13-85	0.7	213	--	3.0	--	--	--	--	--
	05-07-86	1.0	205	7.30	2.5	<8	88	89	108	0
	08-14-86	0.5	254	6.50	3.0	<5	88	86	105	0
610657149430901	08-13-86	0.5	--	5.70	3.0	<2	48	48	58	0
610709149433701	11-12-85	--	430	--	3.5	--	--	--	--	--
	05-06-86	0.5	410	7.30	2.5	<1	177	177	216	0
	08-15-86	0.2	490	6.80	5.5	<2	223	223	272	0
610740149471401	05-05-86	1.0	295	7.20	2.0	<1	112	112	136	0
	08-12-86	1.0	--	6.50	4.0	<1	105	106	129	0
610754149453801	05-05-86	1.0	152	5.90	3.0	<4	63	64	78	0
	08-13-86	1.0	--	5.60	3.0	<2	57	58	71	0
610801149465501	06-23-86	2.0	171	6.20	1.0	<1	59	59	72	0
	08-12-86	1.0	--	6.00	5.5	<1	66	65	79	0
611154149434301	06-20-86	0.3	650	7.20	4.0	<6	286	287	350	0
	08-19-86	0.3	610	6.80	9.5	<1	269	271	330	0

K NON IDEAL COLONY COUNT

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE AREA WELLS--Continued

STATION NUMBER	DATE	CHLORIDE, DISSOLVED (MG/L AS CL) (00940)	NITROGEN, NITRATE DISSOLVED (MG/L AS N) (00618)	NITROGEN, NITRITE DISSOLVED (MG/L AS N) (00613)	NITROGEN, NO2+NO3 DISSOLVED (MG/L AS N) (00631)	NITROGEN, AMMONIA + ORGANIC DIS. (MG/L AS N) (00623)	NITROGEN DISSOLVED (MG/L AS N) (00602)	PHOSPHORUS, ORTHO, DISSOLVED (MG/L AS P) (00671)	PHOSPHORUS, HYDROLYZABLE DIS. (MG/L AS P) (00672)	PHOSPHORUS, HYDRO. + ORTHO DIS. (MG/L AS P) (00677)
610324149460401	06-23-86	16	--	<0.010	2.00	--	--	0.010	--	--
	08-19-86	10	--	<0.010	3.00	--	--	<0.010	--	--
610413149432301	06-24-86	0.70	--	<0.010	<0.100	--	--	0.030	--	--
	08-13-86	1.1	--	<0.010	<0.100	--	--	0.030	--	--
610430149475201	11-13-85	--	--	--	--	--	--	--	--	--
	05-08-86	29	--	<0.010	0.110	0.40	0.51	<0.010	--	0.01
	08-14-86	23	--	<0.010	<0.100	--	--	<0.010	--	--
610440149424401	05-07-86	2.0	--	<0.010	<0.100	0.40	--	<0.010	--	0.01
	08-13-86	2.1	--	<0.010	<0.100	--	--	0.030	--	--
610450149461801	06-23-86	10	--	<0.010	<0.100	--	--	0.020	--	--
	08-14-86	2.0	--	<0.010	<0.100	--	--	0.020	--	--
610514149473901	08-18-86	2.9	--	<0.010	<0.100	--	--	<0.010	--	--
610521149480601	05-07-86	21	--	<0.010	0.310	--	--	--	--	0.02
	08-18-86	20	2.68	0.020	2.70	--	--	<0.010	--	--
610540149445701	11-12-85	--	--	--	--	--	--	--	--	--
	06-24-86	15	--	<0.010	<0.100	--	--	0.070	--	--
	08-15-86	20	--	<0.010	<0.100	--	--	0.090	--	--
610555149434101	06-24-86	4.9	--	<0.010	0.430	--	--	0.010	--	--
	08-15-86	4.7	--	<0.010	0.680	--	--	<0.010	--	--
610555149443801	11-12-85	--	--	--	--	--	--	--	--	--
	05-06-86	8.6	--	<0.010	3.40	--	--	0.020	--	--
	08-15-86	11	--	<0.010	5.90	--	--	0.040	--	--
610603149435601	05-06-86	13	--	<0.010	0.150	--	--	<0.010	--	--
	08-19-86	25	1.92	0.180	2.10	--	--	0.010	--	--
610652149491101	11-13-85	--	--	--	--	--	--	--	--	--
	05-07-86	5.4	1.69	0.010	1.70	0.50	2.2	0.020	0.01	0.03
	08-14-86	5.2	--	<0.010	1.60	--	--	0.020	--	--
610657149430901	08-13-86	6.0	--	<0.010	0.920	--	--	<0.010	--	--
610709149433701	11-12-85	--	--	--	--	--	--	--	--	--
	05-06-86	9.5	--	<0.010	4.90	--	--	<0.010	--	--
	08-15-86	13	--	<0.010	4.00	--	--	<0.010	--	--
610740149471401	05-05-86	14	--	<0.010	3.40	--	--	0.010	--	--
	08-12-86	15	--	<0.010	3.40	--	--	0.010	--	--
610754149453801	05-05-86	5.1	--	<0.010	0.410	--	--	<0.010	--	--
	08-13-86	8.2	--	<0.010	0.300	--	--	<0.010	--	--
610801149465501	06-23-86	11	--	<0.010	0.160	--	--	0.010	--	--
	08-12-86	12	--	<0.010	<0.100	--	--	<0.010	--	--
611154149434301	06-20-86	29	4.94	0.060	5.00	--	--	<0.010	--	--
	08-19-86	29	--	<0.010	1.80	--	--	<0.010	--	--

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE AREA SANITARY LANDFILL WELLS

STATION NUMBER	LOCAL IDENT-I-FIER	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN) (72004)
611210149505301	SB01300320DBBA1 057	09-03-86	1140	0.62	20.00	35
611210149510101	SB01300320DBBB1 058	09-03-86	1315	-0.08	20.50	E5
611214149505901	SB01300320ACCC1 056	09-05-86	0940	-0.05	14.50	20
611214149510301	SB01300320ACCC2 056	09-05-86	1035	0.59	20.00	27
611221149510101	SB01300320ACBC1 055	09-04-86	1030	0.64	15.00	30
611222149505301	SB01300320ACBA2 054	09-04-86	1140	0.69	20.00	25
611223149503901	SB01300320ABDD1 033	10-29-85	1425	--	91.00	35
		11-05-85	1313	--	91.00	36
		11-26-85	1030	E17.00	91.00	60
		08-26-86	0930	6.02	91.00	55
611223149503902	SB01300320ABDD2 033	10-30-85	1333	--	35.00	--
		11-05-85	1225	E9.50	35.00	35
		11-26-85	1230	--	35.00	90
		12-06-85	1130	--	35.00	70
		08-26-86	1035	5.53	35.00	60
611223149505601	SB01300320ACBA1 054	09-04-86	1300	0.69	20.00	30
611224149510801	SB01300320BDAA1 002	10-04-85	1322	--	25.00	14
		11-26-85	1315	6.95	25.00	30
		08-26-86	1200	3.56	25.00	20
611227149504501	SB01300320ABDC1 052	09-03-86	1545	6.44	20.00	20
611228149503901	SB01300320ABDA1 051	09-03-86	1445	6.88	20.00	15
611228149505401	SB01300320ABCD1 053	09-03-86	1705	1.28	15.00	40
611229149501301	SB01300320AADA1 003	10-17-85	1451	--	44.50	--
		11-27-85	1515	E8.70	44.50	E20
		12-06-85	1145	--	44.50	E15
		08-27-86	1350	--	44.50	17
611243149500701	SB01300316CCBC1 006	11-05-85	1700	--	95.00	23
		11-25-85	1345	E53.00	95.00	55
		08-25-86	1100	21.20	95.00	45
611243149500702	SB01300316CCBC2 006	10-29-85	1035	--	70.00	--
		11-05-85	1630	--	70.00	40
		11-25-85	1240	21.74	70.00	60
		08-25-86	1230	20.50	70.00	35
611243149500703	SB01300316CCBC3 006	10-29-85	1233	--	17.00	--
		11-05-85	1408	--	17.00	28
		11-25-85	1445	E30.00	17.00	50
		08-25-86	1430	8.27	17.00	50
611243149501401	SB01300317DDDD1 002	10-04-85	1243	--	69.50	23
		11-27-85	1415	E39.00	70.00	E120
		08-27-86	1120	39.29	69.50	80
611243149504801	SB01300317DCDC1 011	10-04-85	1200	--	49.30	44
		11-27-85	1640	E29.00	49.30	30
		08-27-86	1510	29.76	49.30	35
611259149492601	SB01300316CAAC2 007	10-04-85	1046	--	19.10	33
		11-27-85	1255	4.00	19.10	33
		12-06-85	0940	--	19.10	26
		08-26-86	1300	4.05	19.10	20

E ESTIMATED

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE AREA SANITARY LANDFILL WELLS--Continued

STATION NUMBER	DATE	SAMPLE SOURCE (72005)	SAMPLING CONDITION (72006)	SAMPLE TREATMENT (00115)	FLOW RATE, INSTANTANEOUS (GPM) (00059)	SPECIFIC CONDUCTANCE (US/CM) (00095)	PH (STANDARD UNITS) (00400)	TEMPERATURE (DEG C) (00010)
611210149505301	09-03-86	[1]1	[3]1.00	[4]1	0.5	210	8.90	2.0
611210149510101	09-03-86	1	1.00	1	0.5	340	8.40	3.5
611214149505901	09-05-86	1	1.00	1	0.5	500	7.40	1.5
611214149510301	09-05-86	1	1.00	1	0.8	505	--	2.0
611221149510101	09-04-86	1	1.00	1	0.8	625	6.60	2.5
611222149505301	09-04-86	1	1.00	1	0.8	1350	7.50	2.5
611223149503901	10-29-85	[2]33	1.00	1	9.5	401	--	3.5
	11-05-85	1	1.00	1	2.0	400	--	4.0
	11-26-85	1	1.00	1	7.0	415	8.00	4.0
	08-26-86	1	1.00	1	8.0	420	7.10	4.5
611223149503902	10-30-85	33	1.00	1	0.8	845	--	4.0
	11-05-85	1	1.00	1	2.0	795	--	5.0
	11-26-85	1	1.00	1	1.0	750	7.00	5.0
	12-06-85	1	1.00	1	1.0	675	--	--
	08-26-86	1	1.00	1	2.0	850	6.80	5.0
611223149505601	09-04-86	1	1.00	1	0.8	800	6.70	1.5
611224149510801	10-04-85	1	1.00	1	1.0	445	--	2.5
	11-26-85	1	1.00	1	1.0	410	6.50	3.0
	08-26-86	1	1.00	1	1.0	460	6.80	3.0
611227149504501	09-03-86	1	1.00	1	1.0	1750	6.60	5.0
611228149503901	09-03-86	1	1.00	1	0.5	1000	6.70	6.0
611228149505401	09-03-86	1	1.00	1	0.5	555	6.50	2.0
611229149501301	10-17-85	1	1.00	1	--	840	--	5.0
	11-27-85	1	1.00	1	1.0	--	--	--
	12-06-85	1	1.00	1	1.0	930	--	--
	08-27-86	1	1.00	1	0.8	1050	--	6.5
611243149500701	11-05-85	1	1.00	1	12	269	--	4.0
	11-25-85	1	1.00	1	6.0	274	7.80	4.0
	08-25-86	1	1.00	1	7.5	263	7.80	4.5
611243149500702	10-29-85	33	1.00	1	E2.5	255	--	4.0
	11-05-85	1	1.00	1	12	268	--	4.0
	11-25-85	1	1.00	1	6.0	277	8.60	4.0
	08-25-86	1	1.00	1	7.5	256	8.30	5.0
611243149500703	10-29-85	33	1.00	1	1.0	>4000	--	6.0
	11-05-85	1	1.00	1	2.0	>4000	--	6.5
	11-25-85	1	1.00	1	4.0	E4500	6.40	6.5
	08-25-86	1	1.00	1	1.0	6090	6.80	7.5
611243149501401	10-04-85	1	1.00	1	0.4	540	--	7.0
	11-27-85	33	1.00	1	--	352	--	--
	08-27-86	33	1.00	1	0.3	2020	--	--
611243149504801	10-04-85	1	1.00	1	0.4	2950	--	6.0
	11-27-85	1	1.00	1	0.9	3350	5.90	5.0
	08-27-86	1	1.00	1	0.5	2500	6.20	7.5
611259149492601	10-04-85	1	1.00	1	0.8	700	--	4.5
	11-27-85	1	1.00	1	1.0	620	6.00	4.0
	12-06-85	1	1.00	1	1.0	600	--	--
	08-26-86	1	1.00	1	0.5	670	6.10	4.0

[1] WELLHEAD
[2] BAILER
[3] TESTING
[4] RAW
E ESTIMATED

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE AREA SANITARY LANDFILL WELLS--Continued

STATION NUMBER	LOCAL IDENT- I- FIER	DATE	TIME	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	SODIUM, DIS- SOLVED (MG/L AS NA) (00930)	POTAS- SIUM, DIS- SOLVED (MG/L AS K) (00935)
611210149505301	SB01300320DBBA1 057	09-03-86	1140	56	0	13	5.6	27	2.5
611210149510101	SB01300320DBBB1 058	09-03-86	1315	140	0	32	14	26	3.5
611214149505901	SB01300320ACCC1 056	09-05-86	0940	220	12	56	20	11	1.8
611214149510301	SB01300320ACCC2 056	09-05-86	1035	240	42	61	21	11	1.6
611221149510101	SB01300320ACBC1 055	09-04-86	1030	180	7	48	15	60	2.1
611222149505301	SB01300320ACBA2 054	09-04-86	1140	470	110	120	42	99	3.5
611223149503901	SB01300320ABDD1 033	11-26-85	1030	190	0	43	21	18	2.2
		08-26-86	0930	190	34	42	21	17	2.4
611223149503902	SB01300320ABDD2 033	11-26-85	1230	260	40	73	19	52	5.1
		08-26-86	1035	290	66	82	20	59	5.1
611223149505601	SB01300320ACBA1 054	09-04-86	1300	240	19	66	19	63	1.9
611224149510801	SB01300320BDAA1 002	11-26-85	1315	160	22	43	13	19	2.1
		08-26-86	1200	210	48	56	16	20	2.0
611227149504501	SB01300320ABDC1 052	09-03-86	1545	700	0	180	62	110	2.5
611228149503901	SB01300320ABDA1 051	09-03-86	1445	220	0	60	18	84	4.1
611228149505401	SB01300320ABCD1 053	09-03-86	1705	130	0	36	10	42	1.3
611229149501301	SB01300320AADA1 003	11-27-85	1515	380	280	81	42	50	4.6
		08-27-86	1350	450	360	94	52	39	3.6
611243149500701	SB01300316CCBC1 006	11-25-85	1345	92	0	23	8.5	25	2.6
		08-25-86	1100	91	0	23	8.2	24	2.6
611243149500702	SB01300316CCBC2 006	11-25-85	1240	92	0	23	8.5	25	2.5
		08-25-86	1230	90	0	23	7.9	23	2.4
611243149500703	SB01300316CCBC3 006	11-25-85	1445	2200	0	570	200	570	57
		08-25-86	1430	1800	0	420	180	580	60
611243149501401	SB01300317DDDD1 002	11-27-85	1415	59	0	9.6	8.4	53	6.1
		08-27-86	1120	550	0	110	68	200	49
611243149504801	SB01300317DCDC1 011	11-27-85	1640	2000	390	540	150	310	10
		08-27-86	1510	1200	49	340	80	56	6.8
611259149492601	SB01300316CAAC2 007	11-27-85	1255	290	190	78	22	25	2.0
		08-26-86	1300	280	200	74	22	28	1.7

STATION NUMBER	DATE	ALKA- LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA- LINITY, CARBON- ATE IT-FLD (MG/L - CACO3) (99430)	BICAR- BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR- BONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	FLUO- RIDE, DIS- SOLVED (MG/L AS F) (00950)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI- TUENTS, DIS- SOLVED (MG/L) (70301)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
611210149505301	09-03-86	104	103	--	--	7.0	1.3	0.30	8.2	130	<0.100
611210149510101	09-03-86	155	154	--	--	16	13	0.20	10	210	<0.100
611214149505901	09-05-86	209	210	256	0	37	16	<0.10	18	300	<0.100
611214149510301	09-05-86	196	197	240	0	41	19	<0.10	17	300	<0.100
611221149510101	09-04-86	173	175	214	0	22	110	<0.10	18	390	<0.100
611222149505301	09-04-86	352	358	437	0	8.5	240	0.10	19	770	<0.100
611223149503901	11-26-85	261	261	318	0	47	20	0.10	14	320	<0.100
	08-26-86	157	157	191	0	51	19	0.10	13	260	<0.100
611223149503902	11-26-85	221	221	270	0	21	110	<0.10	28	450	<0.100
	08-26-86	217	221	269	0	24	140	<0.10	28	500	<0.100
611223149505601	09-04-86	224	224	273	0	4.5	140	<0.10	18	470	<0.100
611224149510801	11-26-85	140	139	170	0	12	42	<0.10	17	240	<0.100
	08-26-86	156	158	193	0	10	51	<0.10	18	280	<0.100
611227149504501	09-03-86	754	766	934	0	7.2	220	<0.10	21	1100	<0.100
611228149503901	09-03-86	254	254	310	0	2.5	200	<0.10	20	560	<0.100
611228149505401	09-03-86	130	132	161	0	10	110	<0.10	19	330	<0.100
611229149501301	11-27-85	95	93	114	--	140	180	0.20	9.5	560	<0.100
	08-27-86	93	91	111	0	150	210	0.20	9.0	610	<0.100
611243149500701	11-25-85	135	135	164	0	9.4	5.3	0.20	12	170	<0.100
	08-25-86	125	124	152	0	9.4	4.8	0.30	12	160	<0.100
611243149500702	11-25-85	134	134	164	0	11	5.2	0.30	13	170	<0.100
	08-25-86	132	131	160	0	9.6	4.2	0.30	12	160	<0.100
611243149500703	11-25-85	2480	2550	3110	0	34	720	<0.10	23	3800	<0.100
	08-25-86	2600	2620	3190	0	27	690	<0.10	26	3600	<0.100
611243149501401	11-27-85	146	147	179	0	7.7	23	0.40	16	210	<0.100
	08-27-86	798	804	981	0	29	220	0.20	19	1200	<0.100
611243149504801	11-27-85	1420	1580	1930	0	40	200	<0.10	19	2500	<0.100
	08-27-86	1130	--	--	--	9.5	110	0.20	23	1500	<0.100
611259149492601	11-27-85	100	98	120	0	110	90	<0.10	21	410	<0.100
	08-26-86	78	76	93	0	140	89	<0.10	20	420	<0.100

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE AREA SANITARY LANDFILL WELLS--Continued

STATION NUMBER	DATE	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	ANTI-MONY, TOTAL (UG/L AS SB) (01097)	ARSENIC TOTAL (UG/L AS AS) (01002)	BERYL-LIUM, TOTAL RECOV-ERABLE (UG/L AS BE) (01012)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE) (01044)	IRON, DIS-SOLVED (UG/L AS FE) (01046)
611210149505301	09-03-86	0.040	3	36	--	< 1	33	330	210000	--	170
611210149510101	09-03-86	< 0.010	< 1	8	--	< 1	9	4	1600	--	98
611214149505901	09-05-86	0.010	< 1	2	--	1	7	15	17000	--	13000
611214149510301	09-05-86	< 1.00	< 1	4	--	< 1	40	13	9500	--	5700
611221149510101	09-04-86	0.020	< 1	4	--	< 1	49	19	23000	--	12000
611222149505301	09-04-86	< 0.010	1	6	--	< 1	24	70	63000	--	23000
611223149503901	11-26-85	0.040	1	26	< 10	< 1	12	1	220	160	59
	08-26-86	0.050	1	23	--	< 1	9	3	370	--	67
611223149503902	11-26-85	0.010	6	130	< 10	< 1	8	1	11000	0	11000
	08-26-86	< 0.010	4	130	--	< 1	29	33	14000	--	11000
611223149505601	09-04-86	< 0.010	< 1	4	--	< 1	4	4	250000	--	24000
611224149510801	11-26-85	0.020	2	46	< 10	< 1	56	31	32000	25000	7100
	08-26-86	0.010	4	47	--	< 1	220	110	72000	--	7600
611227149504501	09-03-86	< 0.010	< 1	1	--	< 1	2	4	74000	--	73000
611228149503901	09-03-86	< 0.010	< 1	1	--	< 1	6	4	22000	--	18000
611228149505401	09-03-86	< 0.010	1	6	--	< 1	15	52	58000	--	23000
611229149501301	11-27-85	< 0.010	2	9	< 10	< 1	35	250	220000	220000	49
	08-27-86	< 0.010	2	24	--	< 1	45	210	130000	--	90
611243149500701	11-25-85	0.040	3	54	< 10	< 1	13	1	1900	1000	890
	08-25-86	0.060	2	36	--	< 1	10	10	2400	--	1000
611243149500702	11-25-85	0.070	3	51	< 10	< 1	8	2	2400	1300	1100
	08-25-86	0.060	1	38	--	< 1	28	10	8500	--	700
611243149500703	11-25-85	< 0.010	14	10	< 10	< 1	4	9	110000	17000	93000
	08-25-86	< 0.010	7	41	--	< 1	< 1	8	88000	--	8300
611243149501401	11-27-85	0.070	2	12	< 10	< 1	40	230	99000	99000	390
	08-27-86	< 0.010	5	45	--	1	1	1100	500000	--	1200
611243149504801	11-27-85	< 0.010	2	4	< 10	< 1	5	70	240000	70000	170000
	08-27-86	< 0.010	1	12	--	< 1	2	32	140000	--	130000
611259149492601	11-27-85	< 0.010	1	5	< 10	< 1	220	47	34000	33000	1200
	08-26-86	< 0.010	< 1	3	--	< 1	350	43	25000	--	2200

STATION NUMBER	DATE	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, TOTAL RECOV-ERABLE (UG/L AS MN) (01055)	MANGA-NESE, SUS-PENDED RECOV. (UG/L AS MN) (01054)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	NICKEL, TOTAL RECOV-ERABLE (UG/L AS NI) (01067)	SELE-NIUM, TOTAL (UG/L AS SE) (01147)	SILVER, TOTAL RECOV-ERABLE (UG/L AS AG) (01077)	THAL-LIUM, TOTAL (UG/L AS TL) (01059)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
611210149505301	09-03-86	51	4100	--	24	< 0.10	300	--	--	--	540
611210149510101	09-03-86	< 5	170	--	170	< 0.10	3	--	--	--	50
611214149505901	09-05-86	< 5	600	--	540	0.10	12	--	--	--	20
611214149510301	09-05-86	< 5	460	--	410	0.10	11	--	--	--	< 10
611221149510101	09-04-86	5	1100	--	920	< 0.10	18	--	--	--	40
611222149505301	09-04-86	8	2300	--	1300	0.20	69	--	--	--	120
611223149503901	11-26-85	1	180	50	130	--	< 1	< 1	< 1	< 1	30
	08-26-86	< 5	150	--	130	< 0.10	2	--	--	--	10
611223149503902	11-26-85	< 1	2800	0	2900	--	3	< 1	< 1	< 1	< 10
	08-26-86	< 5	3000	--	3000	< 0.10	13	--	--	--	30
611223149505601	09-04-86	< 5	1500	--	1400	< 0.10	10	--	--	--	20
611224149510801	11-26-85	2	1500	500	1000	0.10	21	< 1	< 1	< 1	80
	08-26-86	12	2400	--	1100	0.40	88	--	--	--	160
611227149504501	09-03-86	< 5	4500	--	4400	0.10	11	--	--	--	20
611228149503901	09-03-86	< 5	1500	--	1300	< 0.10	10	--	--	--	30
611228149505401	09-03-86	< 5	1900	--	1200	0.10	43	--	--	--	170
611229149501301	11-27-85	54	5200	5000	210	0.60	270	< 1	1	< 1	630
	08-27-86	31	3200	--	130	0.40	200	--	--	--	350
611243149500701	11-25-85	< 1	280	50	230	--	< 1	< 1	< 1	< 1	30
	08-25-86	26	250	--	230	0.30	7	--	--	--	30
611243149500702	11-25-85	< 1	290	50	240	--	1	< 1	< 1	< 1	< 10
	08-25-86	10	320	--	210	< 0.10	7	--	--	--	30
611243149500703	11-25-85	< 1	10000	800	9200	--	81	< 1	< 1	< 1	60
	08-25-86	230	6300	--	5900	--	80	--	--	--	40
611243149501401	11-27-85	27	2100	2000	96	0.60	130	< 1	< 1	< 1	480
	08-27-86	300	13000	--	2700	1.1	1000	--	--	--	3500
611243149504801	11-27-85	8	84000	8000	76000	0.40	170	< 1	< 1	< 1	200
	08-27-86	< 5	59000	--	56000	0.20	40	--	--	--	70
611259149492601	11-27-85	5	1100	530	570	--	42	< 1	< 1	< 1	100
	08-26-86	< 5	810	--	480	0.10	50	--	--	--	70

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE AREA SANITARY LANDFILL WELLS--Continued

STATION NUMBER	DATE	ZINC, DIS-SOLVED (UG/L AS ZN) (01090)	CYANIDE TOTAL (MG/L AS CN) (00720)	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROM-OFORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)
611210149505301	09-03-86	7	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
611210149510101	09-03-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	<0.20	0.70
611214149505901	09-05-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
611214149510301	09-05-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
611221149510101	09-04-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
611222149505301	09-04-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
611223149503901	11-26-85	--	<0.010	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
	08-26-86	--	--	<0.20	0.20	<0.20	<0.20	<0.20	0.20	0.30	<0.20
611223149503902	11-26-85	--	<0.010	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
	08-26-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.70	<0.20
611223149505601	09-04-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
611224149510801	11-26-85	--	<0.010	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
	08-26-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
611227149504501	09-03-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	0.30	<0.20	<0.20
611228149503901	09-03-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	<0.20	1.3
611228149505401	09-03-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	1.3
611229149501301	11-27-85	--	<0.010	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
	08-27-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
611243149500701	11-25-85	--	<0.010	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
	08-25-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
611243149500702	11-25-85	--	<0.010	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
	08-25-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
611243149500703	11-25-85	--	<0.010	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	530	20
	08-25-86	--	--	<0.20	<0.20	1.5	<0.20	<0.20	<0.20	560	17
611243149501401	11-27-85	--	<0.010	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
	08-27-86	--	--	<0.20	<0.20	0.40	<0.20	<0.20	<0.20	<0.20	0.30
611243149504801	11-27-85	--	<0.010	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	300	6.7
	08-27-86	--	--	<0.20	<0.20	1.0	<0.20	<0.20	0.60	440	4.7
611259149492601	11-27-85	--	<0.010	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
	08-26-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20

STATION NUMBER	DATE	ACE-NAPHTH-YLENE TOTAL (UG/L) (34200)	ACE-NAPHTH-ENE TOTAL (UG/L) (34205)	ANTHRA-CENE TOTAL (UG/L) (34220)	BENZO B FLUOR-AN-THENE TOTAL (UG/L) (34230)	BENZO K FLUOR-AN-THENE TOTAL (UG/L) (34242)	BENZO-A-PYRENE TOTAL (UG/L) (34247)	BIS 2-CHLORO-ETHYL ETHER TOTAL (UG/L) (34273)	BIS (2-CHLORO-ETHOXY) METHANE TOTAL (UG/L) (34278)	BIS (2-CHLORO-ISO-PROPYL) ETHER TOTAL (UG/L) (34283)	N-BUTYL BENZYL PHTHAL-ATE TOTAL (UG/L) (34292)
611210149505301	09-03-86	--	--	--	--	--	--	--	--	--	--
611210149510101	09-03-86	--	--	--	--	--	--	--	--	--	--
611214149505901	09-05-86	--	--	--	--	--	--	--	--	--	--
611214149510301	09-05-86	--	--	--	--	--	--	--	--	--	--
611221149510101	09-04-86	--	--	--	--	--	--	--	--	--	--
611222149505301	09-04-86	--	--	--	--	--	--	--	--	--	--
611223149503901	11-26-85	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0
	08-26-86	--	--	--	--	--	--	--	--	--	--
611223149503902	11-26-85	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0
	08-26-86	--	--	--	--	--	--	--	--	--	--
611223149505601	09-04-86	--	--	--	--	--	--	--	--	--	--
611224149510801	11-26-85	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0
	08-26-86	--	--	--	--	--	--	--	--	--	--
611227149504501	09-03-86	--	--	--	--	--	--	--	--	--	--
611228149503901	09-03-86	--	--	--	--	--	--	--	--	--	--
611228149505401	09-03-86	--	--	--	--	--	--	--	--	--	--
611229149501301	11-27-85	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0
	08-27-86	--	--	--	--	--	--	--	--	--	--
611243149500701	11-25-85	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0
	08-25-86	--	--	--	--	--	--	--	--	--	--
611243149500702	11-25-85	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0
	08-25-86	--	--	--	--	--	--	--	--	--	--
611243149500703	11-25-85	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0
	08-25-86	--	--	--	--	--	--	--	--	--	--
611243149501401	11-27-85	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0
	08-27-86	--	--	--	--	--	--	--	--	--	--
611243149504801	11-27-85	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0
	08-27-86	--	--	--	--	--	--	--	--	--	--
611259149492601	11-27-85	<5.0	<5.0	<5.0	<10.0	<10.0	<10.0	<5.0	<5.0	<5.0	<5.0
	08-26-86	--	--	--	--	--	--	--	--	--	--

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE AREA SANITARY LANDFILL WELLS--Continued

STATION NUMBER	DATE	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	CHRY-SENE TOTAL (UG/L) (34320)	DIETHYL PHTHAL-ATE TOTAL (UG/L) (34336)	DI-METHYL PHTHAL-ATE TOTAL (UG/L) (34341)	ETHYL-BENZENE TOTAL (UG/L) (34371)	FLUOR-ANTHENE TOTAL (UG/L) (34376)	FLUOR-ENE TOTAL (UG/L) (34381)	HEXA-CHLORO-CYCLO-PENT-ADIENE TOTAL (UG/L) (34386)	HEXA-CHLORO-ETHANE TOTAL (UG/L) (34396)
611210149505301	09-03-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611210149510101	09-03-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611214149505901	09-05-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611214149510301	09-05-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611221149510101	09-04-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611222149505301	09-04-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611223149503901	11-26-85	< 3.0	< 3.0	< 10.0	< 5.0	< 5.0	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0
	08-26-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611223149503902	11-26-85	< 3.0	< 3.0	< 10.0	< 5.0	< 5.0	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0
	08-26-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611223149505601	09-04-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611224149510801	11-26-85	< 3.0	< 3.0	< 10.0	< 5.0	< 5.0	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0
	08-26-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611227149504501	09-03-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611228149503901	09-03-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611228149505401	09-03-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611229149501301	11-27-85	< 3.0	< 3.0	< 10.0	< 5.0	< 5.0	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0
	08-27-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611243149500701	11-25-85	< 3.0	< 3.0	< 10.0	< 5.0	< 5.0	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0
	08-25-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611243149500702	11-25-85	< 3.0	< 3.0	< 10.0	< 5.0	< 5.0	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0
	08-25-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--
611243149500703	11-25-85	< 3.0	9.2	< 10.0	42.0	< 5.0	4.8	< 5.0	< 5.0	< 5.0	< 5.0
	08-25-86	< 0.20	< 6.9	--	--	--	4.3	--	--	--	--
611243149501401	11-27-85	< 3.0	< 3.0	< 10.0	< 5.0	< 5.0	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0
	08-27-86	< 0.20	6.4	--	--	--	< 0.20	--	--	--	--
611243149504801	11-27-85	< 3.0	33	< 10.0	< 5.0	< 5.0	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0
	08-27-86	< 0.20	13	--	--	--	3.3	--	--	--	--
611259149492601	11-27-85	< 3.0	< 3.0	< 10.0	< 5.0	< 5.0	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0
	08-26-86	< 0.20	< 0.20	--	--	--	< 0.20	--	--	--	--

STATION NUMBER	DATE	INDENO (1,2,3-CD) PYRENE TOTAL (UG/L) (34403)	ISO-PHORONE TOTAL (UG/L) (34408)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL CHLOR-IDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	N-NITRO-SODI-N-PROPYL-AMINE TOTAL (UG/L) (34428)	N-NITRO-SODI-PHENY-LAMINE TOTAL (UG/L) (34433)	N-NITRO-SODI-METHY-LAMINE TOTAL (UG/L) (34438)	NITRO-BENZENE TOTAL (UG/L) (34447)	PARA-CHLORO-META CRESOL TOTAL (UG/L) (34452)
611210149505301	09-03-86	--	--	< 0.20	< 0.20	< 1.0	--	--	--	--	--
611210149510101	09-03-86	--	--	< 0.20	< 0.20	< 1.0	--	--	--	--	--
611214149505901	09-05-86	--	--	< 0.20	< 0.20	< 8.0	--	--	--	--	--
611214149510301	09-05-86	--	--	< 0.20	< 0.20	< 8.0	--	--	--	--	--
611221149510101	09-04-86	--	--	< 0.20	< 0.20	< 1.0	--	--	--	--	--
611222149505301	09-04-86	--	--	< 0.20	< 0.20	< 1.0	--	--	--	--	--
611223149503901	11-26-85	< 10.0	< 5.0	< 3.0	--	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0	< 30.0
	08-26-86	--	--	< 0.20	< 0.20	66	--	--	--	--	--
611223149503902	11-26-85	< 10.0	< 5.0	< 3.0	--	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0	< 30.0
	08-26-86	--	--	< 0.20	< 0.20	< 2.0	--	--	--	--	--
611223149505601	09-04-86	--	--	< 0.20	< 0.20	< 1.5	--	--	--	--	--
611224149510801	11-26-85	< 10.0	< 5.0	< 3.0	--	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0	< 30.0
	08-26-86	--	--	< 0.20	< 0.20	< 1.0	--	--	--	--	--
611227149504501	09-03-86	--	--	< 0.20	< 0.20	< 1.0	--	--	--	--	--
611228149503901	09-03-86	--	--	< 0.20	< 0.20	< 1.0	--	--	--	--	--
611228149505401	09-03-86	--	--	< 0.20	< 0.20	< 1.0	--	--	--	--	--
611229149501301	11-27-85	< 10.0	< 5.0	< 3.0	--	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0	< 30.0
	08-27-86	--	--	< 0.20	< 0.20	< 1.0	--	--	--	--	--
611243149500701	11-25-85	< 10.0	< 5.0	< 3.0	--	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0	< 30.0
	08-25-86	--	--	< 0.20	< 0.20	< 0.20	--	--	--	--	--
611243149500702	11-25-85	< 10.0	< 5.0	< 3.0	--	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0	< 30.0
	08-25-86	--	--	< 0.20	< 0.20	1.0	--	--	--	--	--
611243149500703	11-25-8	< 10.0	< 5.0	< 3.0	--	10	< 5.0	< 5.0	< 5.0	< 5.0	< 30.0
	08-25-86	--	--	< 0.20	< 0.20	< 1.0	--	--	--	--	--
611243149501401	11-27-8	< 10.0	< 5.0	< 3.0	--	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0	< 30.0
	08-27-86	--	--	< 0.20	2.7	1.5	--	--	--	--	--
611243149504801	11-27-8	< 10.0	< 5.0	< 3.0	--	320	< 5.0	< 5.0	< 5.0	< 5.0	< 30.0
	08-27-86	--	--	< 0.20	1.3	210	--	--	--	--	--
611259149492601	11-27-85	< 10.0	< 5.0	< 3.0	--	< 3.0	< 5.0	< 5.0	< 5.0	< 5.0	< 30.0
	08-26-86	--	--	< 0.20	< 0.20	< 1.0	--	--	--	--	--

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE AREA SANITARY LANDFILL WELLS--Continued

STATION NUMBER	DATE	PHENANTHRENE TOTAL (UG/L) (34461)	PYRENE TOTAL (UG/L) (34469)	TETRACHLOROETHYLENE TOTAL (UG/L) (34475)	TRICHLOROFLUOROMETHANE TOTAL (UG/L) (34488)	1,1-DICHLOROETHANE TOTAL (UG/L) (34496)	1,1-DICHLOROETHYLENE TOTAL (UG/L) (34501)	1,1,1-TRICHLOROETHANE TOTAL (UG/L) (34506)	1,1,2-TRICHLOROETHANE TOTAL (UG/L) (34511)	1,1,2,2 TETRACHLOROETHANE TOTAL (UG/L) (34516)	BENZOGHI PERYLENE1,12-BENZOPERYLENE TOTAL (UG/L) (34521)
611210149505301	09-03-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611210149510101	09-03-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611214149505901	09-05-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611214149510301	09-05-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611221149510101	09-04-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611222149505301	09-04-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611223149503901	11-26-85	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<10.0
	08-26-86	--	--	<0.20	0.30	<0.20	<0.20	<0.20	<0.20	<0.20	--
611223149503902	11-26-85	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<10.0
	08-26-86	--	--	<0.20	<0.20	0.40	<0.20	<0.20	<0.20	<0.20	--
611223149505601	09-04-86	--	--	<0.20	<0.20	<0.20	<0.20	0.80	<0.20	<0.20	--
611224149510801	11-26-85	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<10.0
	08-26-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611227149504501	09-03-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611228149503901	09-03-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611228149505401	09-03-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611229149501301	11-27-85	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<10.0
	08-27-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611243149500701	11-25-85	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<10.0
	08-25-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611243149500702	11-25-85	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<10.0
	08-25-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611243149500703	11-25-85	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<10.0
	08-25-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611243149501401	11-27-85	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<10.0
	08-27-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--
611243149504801	11-27-85	<5.0	<5.0	6.9	<3.0	130	<3.0	25	<3.0	<3.0	<10.0
	08-27-86	--	--	0.40	4.5	140	<0.20	26	<0.20	<0.20	--
611259149492601	11-27-85	<5.0	<5.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<10.0
	08-26-86	--	--	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	--

STATION NUMBER	DATE	BENZO A ANTHRACENE1,2-BENZANTHRACENE TOTAL (UG/L) (34526)	1,2-DICHLOROBENZENE TOTAL (UG/L) (34536)	1,2-DICHLOROPROPANE TOTAL (UG/L) (34541)	CHLOROETHYLENE TOTAL (UG/L) (34546)	1,2,4-TRICHLOROBENZENE TOTAL (UG/L) (34551)	1,2,5,6-DIBENZ-ANTHRACENE TOTAL (UG/L) (34556)	1,3-DICHLOROPROPANE TOTAL (UG/L) (34561)	1,3-DICHLOROBENZENE TOTAL (UG/L) (34566)	1,4-DICHLOROBENZENE TOTAL (UG/L) (34571)	2-CHLOROETHYLVINYLETHER TOTAL (UG/L) (34576)
611210149505301	09-03-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611210149510101	09-03-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611214149505901	09-05-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611214149510301	09-05-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611221149510101	09-04-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611222149505301	09-04-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611223149503901	11-26-85	<5.0	<5.0	<3.0	<3.0	<5.0	<10.0	<3.0	<5.0	<5.0	<3.0
	08-26-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611223149503902	11-26-85	<5.0	<5.0	<3.0	<3.0	<5.0	<10.0	<3.0	<5.0	<5.0	<3.0
	08-26-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611223149505601	09-04-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611224149510801	11-26-85	<5.0	<5.0	<3.0	<3.0	<5.0	<10.0	<3.0	<5.0	<5.0	<3.0
	08-26-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611227149504501	09-03-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611228149503901	09-03-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611228149505401	09-03-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611229149501301	11-27-85	<5.0	<5.0	<3.0	<3.0	<5.0	<10.0	<3.0	<5.0	<5.0	<3.0
	08-27-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611243149500701	11-25-85	<5.0	<5.0	<3.0	<3.0	<5.0	<10.0	<3.0	<5.0	<5.0	<3.0
	08-25-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611243149500702	11-25-85	<5.0	<5.0	<3.0	<3.0	<5.0	<10.0	<3.0	<5.0	<5.0	<3.0
	08-25-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611243149500703	11-25-85	<5.0	<5.0	<3.0	8.8	<5.0	<10.0	<3.0	<5.0	<5.0	<3.0
	08-25-86	--	<0.20	0.50	6.9	--	--	<0.20	<0.20	<0.20	<0.20
611243149501401	11-27-85	<5.0	<5.0	<3.0	<3.0	<5.0	<10.0	<3.0	<5.0	<5.0	<3.0
	08-27-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611243149504801	11-27-85	<5.0	<5.0	<3.0	7.8	<5.0	<10.0	<3.0	<5.0	<5.0	<3.0
	08-27-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20
611259149492601	11-27-85	<5.0	<5.0	<3.0	<3.0	<5.0	<10.0	<3.0	<5.0	<5.0	<3.0
	08-26-86	--	<0.20	<0.20	<0.20	--	--	<0.20	<0.20	<0.20	<0.20

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE AREA SANITARY LANDFILL WELLS --Continued

STATION NUMBER	DATE	2-CHLORO-NAPH-THALENE TOTAL (UG/L) (34581)	2-CHLORO-PHENOL TOTAL (UG/L) (34586)	2-NITRO-PHENOL TOTAL (UG/L) (34591)	DI-N-OCTYL PHTHAL-ATE TOTAL (UG/L) (34596)	2,4-DI-CHLORO-PHENOL TOTAL (UG/L) (34601)	2,4-DI-METHYL-PHENOL TOTAL (UG/L) (34606)	2,4-DI-NITRO-TOLUENE TOTAL (UG/L) (34611)	2,4,-DI-NITRO-PHENOL TOTAL (UG/L) (34616)	2,4,6-TRI-CHLORO-PHENOL TOTAL (UG/L) (34621)	2,6-DI-NITRO-TOLUENE TOTAL (UG/L) (34626)
611210149505301	09-03-86	--	--	--	--	--	--	--	--	--	--
611210149510101	09-03-86	--	--	--	--	--	--	--	--	--	--
611214149505901	09-05-86	--	--	--	--	--	--	--	--	--	--
611214149510301	09-05-86	--	--	--	--	--	--	--	--	--	--
611221149510101	09-04-86	--	--	--	--	--	--	--	--	--	--
611222149505301	09-04-86	--	--	--	--	--	--	--	--	--	--
611223149503901	11-26-85	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0
	08-26-86	--	--	--	--	--	--	--	--	--	--
611223149503902	11-26-85	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0
	08-26-86	--	--	--	--	--	--	--	--	--	--
611223149505601	09-04-86	--	--	--	--	--	--	--	--	--	--
611224149510801	11-26-85	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0
	08-26-86	--	--	--	--	--	--	--	--	--	--
611227149504501	09-03-86	--	--	--	--	--	--	--	--	--	--
611228149503901	09-03-86	--	--	--	--	--	--	--	--	--	--
611228149505401	09-03-86	--	--	--	--	--	--	--	--	--	--
611229149501301	11-27-85	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0
	08-27-86	--	--	--	--	--	--	--	--	--	--
611243149500701	11-25-85	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0
	08-25-86	--	--	--	--	--	--	--	--	--	--
611243149500702	11-25-85	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0
	08-25-86	--	--	--	--	--	--	--	--	--	--
611243149500703	11-25-85	<5.0	<5.0	<5.0	<10.0	<5.0	6.0	<5.0	<20.0	<20.0	<5.0
	08-25-86	--	--	--	--	--	--	--	--	--	--
611243149501401	11-27-85	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0
	08-27-86	--	--	--	--	--	--	--	--	--	--
611243149504801	11-27-85	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0
	08-27-86	--	--	--	--	--	--	--	--	--	--
611259149492601	11-27-85	<5.0	<5.0	<5.0	<10.0	<5.0	<5.0	<5.0	<20.0	<20.0	<5.0
	08-26-86	--	--	--	--	--	--	--	--	--	--

STATION NUMBER	DATE	4-BROMO-PHENYL PHENYL ETHER TOTAL (UG/L) (34636)	4-CHLORO-PHENYL PHENYL ETHER TOTAL (UG/L) (34641)	4-NITRO-PHENOL TOTAL (UG/L) (34646)	4,6-DINITRO-ORTHO-CRESOL TOTAL (UG/L) (34657)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	PHENOL (C6H-5OH) TOTAL (UG/L) (34694)	NAPHTH-ALENE TOTAL (UG/L) (34696)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)
611210149505301	09-03-86	--	--	--	--	<0.20	--	--	<0.20	<0.20
611210149510101	09-03-86	--	--	--	--	<0.20	--	--	<0.20	<0.20
611214149505901	09-05-86	--	--	--	--	<0.20	--	--	<0.20	<0.20
611214149510301	09-05-86	--	--	--	--	<0.20	--	--	<0.20	<0.20
611221149510101	09-04-86	--	--	--	--	<0.20	--	--	<0.20	<0.20
611222149505301	09-04-86	--	--	--	--	0.20	--	--	<0.20	<0.20
611223149503901	11-26-85	<5.0	<5.0	<30.0	<30.0	<3.0	<5.0	<5.0	--	--
	08-26-86	--	--	--	--	0.20	--	--	<0.20	<0.20
611223149503902	11-26-85	<5.0	<5.0	<30.0	<30.0	<3.0	<5.0	<5.0	--	--
	08-26-86	--	--	--	--	0.70	--	--	<0.20	<0.20
611223149505601	09-04-86	--	--	--	--	1.4	--	--	<0.20	<0.20
611224149510801	11-26-85	<5.0	<5.0	<30.0	<30.0	<3.0	<5.0	<5.0	--	--
	08-26-86	--	--	--	--	0.30	--	--	<0.20	<0.20
611227149504501	09-03-86	--	--	--	--	4.1	--	--	<0.20	<0.20
611228149503901	09-03-86	--	--	--	--	<0.20	--	--	<0.20	<0.20
611228149505401	09-03-86	--	--	--	--	1.3	--	--	<0.20	<0.20
611229149501301	11-27-85	<5.0	<5.0	<30.0	<30.0	<3.0	<5.0	<5.0	--	--
	08-27-86	--	--	--	--	<0.20	--	--	<0.20	<0.20
611243149500701	11-25-85	<5.0	<5.0	<30.0	<30.0	<3.0	<5.0	<5.0	--	--
	08-25-86	--	--	--	--	<0.20	--	--	<0.20	<0.20
611243149500702	11-25-85	<5.0	<5.0	<30.0	<30.0	<3.0	<5.0	<5.0	--	--
	08-25-86	--	--	--	--	<0.20	--	--	<0.20	<0.20
611243149500703	11-25-85	<5.0	<5.0	<30.0	<30.0	<3.0	<5.0	<5.0	--	--
	08-25-86	--	--	--	--	<0.20	--	--	<0.20	<0.20
611243149501401	11-27-85	<5.0	<5.0	<30.0	<30.0	<3.0	<5.0	<5.0	--	--
	08-27-86	--	--	--	--	0.60	--	--	<0.20	<0.20
611243149504801	11-27-85	<5.0	<5.0	<30.0	<30.0	7.6	<5.0	<5.0	--	--
	08-27-86	--	--	--	--	90	--	--	<0.20	<0.20
611259149492601	11-27-85	<5.0	<5.0	<30.0	<30.0	<3.0	<5.0	<5.0	--	--
	08-26-86	--	--	--	--	<0.20	--	--	<0.20	<0.20

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

ANCHORAGE AREA SANITARY LANDFILL WELLS--Continued

STATION NUMBER	DATE	PENTA-CHLORO-PHENOL TOTAL (UG/L) (39032)	1,2-DIBROMO ETH-YLENE TOTAL (UG/L) (39082)	BIS(2-ETHYL HEXYL) PHTHAL-ATE TOTAL (UG/L) (39100)	DI-N-BUTYL PHTHAL-ATE TOTAL (UG/L) (39110)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	HEXA-CHLORO-BENZENE TOTAL (UG/L) (39700)	HEXA-CHLORO-BUT-ADIENE TOTAL (UG/L) (39702)	STYRENE TOTAL (UG/L) (77128)
611210149505301	09-03-86	--	< 0.2	--	--	< 0.20	< 0.2	--	--	< 0.2
611210149510101	09-03-86	--	< 0.2	--	--	< 0.20	< 0.2	--	--	< 0.2
611214149505901	09-05-86	--	< 0.2	--	--	< 0.20	< 0.2	--	--	< 0.2
611214149510301	09-05-86	--	< 0.2	--	--	< 0.20	< 0.2	--	--	< 0.2
611221149510101	09-04-86	--	< 0.2	--	--	< 0.20	< 0.2	--	--	< 0.2
611222149505301	09-04-86	--	< 0.2	--	--	< 0.20	< 0.2	--	--	< 0.2
611223149503901	11-26-85	< 30.0	--	< 5.0	< 5.0	< 3.0	< 3.0	< 5.0	< 5.0	--
	08-26-86	--	< 0.2	--	--	< 0.20	0.4	--	--	< 0.2
611223149503902	11-26-85	< 30.0	--	< 5.0	< 5.0	< 3.0	< 3.0	< 5.0	< 5.0	--
	08-26-86	--	< 0.2	--	--	0.90	< 0.2	--	--	< 0.2
611223149505601	09-04-86	--	< 0.2	--	--	< 0.20	< 0.2	--	--	< 0.2
611224149510801	11-26-85	< 30.0	--	< 5.0	< 5.0	< 3.0	< 3.0	< 5.0	< 5.0	--
	08-26-86	--	< 0.2	--	--	< 0.20	< 0.2	--	--	< 0.2
611227149504501	09-03-86	--	< 0.2	--	--	2.3	< 0.2	--	--	< 0.2
611228149503901	09-03-86	--	< 0.2	--	--	< 0.20	< 0.2	--	--	< 0.2
611228149505401	09-03-86	--	< 0.2	--	--	< 0.20	< 0.2	--	--	< 0.2
611229149501301	11-27-85	< 30.0	--	< 5.0	< 5.0	< 3.0	< 3.0	< 5.0	< 5.0	--
	08-27-86	--	< 0.2	--	--	< 0.20	< 0.2	--	--	< 0.2
611243149500701	11-25-85	< 30.0	--	< 5.0	< 5.0	< 3.0	< 3.0	< 5.0	< 5.0	--
	08-25-86	--	< 0.2	--	--	< 0.20	< 0.2	--	--	< 0.2
611243149500702	11-25-85	< 30.0	--	35.0	< 5.0	< 3.0	< 3.0	< 5.0	< 5.0	--
	08-25-86	--	< 0.2	--	--	0.40	< 0.2	--	--	< 0.2
611243149500703	11-25-85	< 30.0	--	< 5.0	< 5.0	53	< 3.0	< 5.0	< 5.0	--
	08-25-86	--	< 0.2	--	--	46	0.7	--	--	< 0.2
611243149501401	11-27-85	< 30.0	--	65.0	< 5.0	< 3.0	< 3.0	< 5.0	< 5.0	--
	08-27-86	--	< 0.2	--	--	2.9	< 0.2	--	--	< 0.2
611243149504801	11-27-85	< 30.0	--	< 5.0	< 5.0	3.5	6.7	< 5.0	< 5.0	--
	08-27-86	--	< 0.2	--	--	3.9	8.0	--	--	< 0.2
611259149492601	11-27-85	< 30.0	--	< 5.0	< 5.0	< 3.0	< 3.0	< 5.0	< 5.0	--
	08-26-86	--	< 0.2	--	--	< 0.20	< 0.2	--	--	< 0.2

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

PETERS CREEK-EAGLE RIVER AREA WELLS

STATION NUMBER	LOCAL IDENT-I-FIER	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN) (72004)	SAMPLE SOURCE (72005)
611422149271001	SB01300104DDCD1 004	06-18-86	0930	5.08	20.50	45	1/26
		08-11-86	1340	3.98	20.50	30	26
611459149273901	SB01300104ACBB1 003	06-18-86	1055	6.81	19.50	35	26
		08-11-86	1510	2.42	19.50	30	26
611517149180401	SA01400132DDDB1 023	06-19-86	0915	1.22	20.50	30	26
		08-21-86	1145	0.80	20.50	45	26
611517149281601	SB01400133CCDA1 007	06-18-86	1230	5.12	20.50	30	26
		08-11-86	1650	4.51	20.50	30	26
611741149342301	SB01400223AACB2 001	08-28-86	1400	-0.93	21.00	30	26
611741149342501	SB01400223AACB1 001	11-14-85	1515	--	20.50	45	26
		06-25-86	0910	13.68	20.50	35	26
		08-28-86	1453	13.97	20.50	13	26
611755149260801	SB01400115CDBC1 005	06-19-86	1115	5.09	20.00	29	26
		08-21-86	1340	6.80	20.00	50	26
611826149280201	SB01400116BDBA1 023	06-19-86	1250	11.53	20.50	30	26
		08-22-86	1130	12.16	20.50	75	26
611841149281201	SB01400109CCDD1 009	06-19-86	1515	13.46	20.50	75	26
		08-20-86	1015	13.23	20.50	105	26
612128149325701	SB01500225DCBA1 030	06-17-86	1010	9.32	20.50	30	26
		08-22-86	0900	4.89	20.50	30	26
612134149324301	SB01500225DBDA1 029	06-17-86	1240	3.90	20.50	30	26
		08-19-86	1400	3.43	20.50	25	26
612147149303901	SB01500130ADDB1 011	08-20-86	1415	2.03	20.50	35	26
612435149255701	SB01500110ABCB1 067	11-14-85	1230	--	20.00	45	--
		06-16-86	1325	15.57	20.00	75	26
		08-20-86	1225	14.83	20.00	45	26
612438149281801	SB01500109BBAD1 004	06-17-86	0830	6.34	11.50	30	26
		08-20-86	0900	6.43	11.50	35	26
612520149245101	SB01500102BCBA3 005	06-16-86	1030	8.93	20.00	40	26
		08-20-86	1040	8.53	20.00	35	26

STATION NUMBER	DATE	SAM-PLING CONDI-TION (72006)	SAMPLE TREAT-MENT (00115)	FLOW RATE, INSTAN-TANEOUS (GPM) (00059)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	COLI-FORM, FECAL, 0.7 UM-MF (COLS./ 100 ML) (31625)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)
611422149271001	06-18-86	2/1.00	3/1	0.2	290	8.20	5.5	< 2	137
	08-11-86	1.00	1	0.5	291	7.10	8.5	< 1	145
611459149273901	06-18-86	1.00	1	2.0	340	7.30	3.5	< 2	178
	08-11-86	1.00	1	0.5	--	6.60	6.0	< 1	184
611517149180401	06-19-86	1.00	1	0.5	286	8.00	4.0	< 2	149
	08-21-86	1.00	1	0.2	315	7.50	7.5	< 1	165
611517149281601	06-18-86	1.00	1	2.0	169	7.20	2.5	< 2	67
	08-11-86	1.00	1	1.0	--	5.80	4.0	< 1	72
611741149342301	08-28-86	1.00	1	0.3	525	6.90	3.0	< 3	337
611741149342501	11-14-85	1.00	1	0.2	1500	--	1.5	--	--
	06-25-86	1.00	1	0.3	1720	6.70	5.5	< 10	750
	08-28-86	1.00	1	0.3	2000	6.10	6.0	< 3	890
611755149260801	06-19-86	1.00	1	0.02	1950	6.80	5.0	< 1	607
	08-21-86	1.00	1	0.1	2300	6.60	6.0	< 1	580
611826149280201	06-19-86	1.00	1	0.2	1580	7.60	7.0	< 1	431
	08-22-86	1.00	1	0.05	1800	7.10	7.0	< 1	416
611841149281201	06-19-86	1.00	1	0.03	460	--	7.0	< 1	233
	08-20-86	1.00	1	0.05	475	7.60	7.0	< 1	221
612128149325701	06-17-86	1.00	1	1.0	680	6.70	3.0	< 2	340
	08-22-86	1.00	1	1.0	750	6.40	4.0	< 4	346
612134149324301	06-17-86	1.00	1	3.0	590	6.50	3.5	< 2	304
	08-19-86	1.00	1	1.0	620	6.20	5.0	K1	308
612147149303901	08-20-86	1.00	1	0.3	249	7.00	7.0	< 4	128
612435149255701	11-14-85	1.00	1	0.1	468	--	0.0	--	--
	06-16-86	1.00	1	0.05	435	7.70	12.0	< 1	184
	08-20-86	1.00	1	0.1	465	6.30	5.5	< 1	192
612438149281801	06-17-86	1.00	1	0.5	279	7.60	3.5	< 1	108
	08-20-86	1.00	1	0.5	285	6.50	4.0	K3	113
612520149245101	06-16-86	1.00	1	0.8	351	7.80	3.0	< 5	147
	08-20-86	1.00	1	1.0	380	6.80	3.0	< 2	163

1/ PUMP
2/ TESTING
3/ RAW
K NON-IDEAL COLONY COUNT

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

PETERS CREEK-EAGLE RIVER AREA WELLS--Continued

STATION NUMBER	DATE	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	NITRO-GEN, NITRATE DIS-SOLVED (MG/L AS N) (00618)	NITRO-GEN, NITRITE DIS-SOLVED (MG/L AS N) (00613)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)
611422149271001	06-18-86	137	167	0	1.4	--	<0.010	0.310	0.030
	08-11-86	144	176	0	1.7	--	<0.010	0.490	<0.010
611459149273901	06-13-86	177	216	0	6.3	--	<0.010	0.120	0.010
	08-11-86	185	225	0	9.6	--	<0.010	0.110	<0.010
611517149180401	06-19-86	150	183	0	1.4	--	<0.010	<0.100	<0.010
	08-21-86	165	201	0	1.1	--	<0.010	<0.100	<0.010
611517149281601	06-18-86	67	81	0	0.90	--	<0.010	0.810	<0.010
	08-11-86	71	86	0	1.1	--	<0.010	0.960	<0.010
611741149342301	08-28-86	339	413	0	11	--	<0.010	<0.100	<0.010
611741149342501	11-14-85	--	--	--	--	--	--	--	--
	06-25-86	756	922	0	84	--	0.010	<0.100	<0.010
	08-28-86	900	1090	0	73	--	0.010	<0.100	<0.010
611755149260801	06-19-86	613	747	0	440	--	<0.010	<0.100	<0.010
	08-21-86	587	716	0	420	--	<0.010	<0.100	<0.010
611826149280201	06-19-86	436	531	0	300	5.76	0.040	5.80	<0.010
	08-22-86	422	515	0	340	5.36	0.040	5.40	<0.010
611841149281201	06-19-86	229	280	0	8.2	--	<0.010	3.70	<0.010
	08-20-86	222	270	0	9.0	--	<0.010	2.40	<0.010
612128149325701	06-17-86	344	419	0	33	2.31	0.090	2.40	<0.010
	08-22-86	346	422	0	58	0.100	0.040	0.140	<0.010
612134149324301	06-17-86	308	376	0	23	--	<0.010	<0.100	<0.010
	08-19-86	310	378	0	24	--	<0.010	<0.100	<0.010
612147149303901	08-20-86	127	155	0	2.7	0.190	0.010	0.200	<0.010
612435149255701	11-14-85	--	--	--	--	--	--	--	--
	06-16-86	181	221	0	12	--	<0.010	8.80	0.030
	08-20-86	196	239	0	15	--	<0.010	8.30	<0.010
612438149281801	06-17-86	108	131	0	14	--	<0.010	2.20	<0.010
	08-20-86	112	137	0	16	--	<0.010	2.40	<0.010
612520149245101	06-16-86	147	180	0	1.2	--	<0.010	3.20	<0.010
	08-20-86	163	199	0	1.5	--	<0.010	3.10	<0.010

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

MATANUSKA-SUSITNA BOROUGH LANDFILL WELLS

STATION NUMBER	LOCAL IDENT-I-FIER	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	PUMP OR FLOW PERIOD PRIOR TO SAM-PLING (MIN) (72004)	SAMPLE SOURCE (72005)	SAM-PLING CONDI-TION (72006)
613211149000901	SA01700225ACDA1 007	04-24-86	1055	--	80.00	--	1/28	--
613212149002801	SA01700225ACBC1 006	04-23-86	1612	40.05	57.00	20	2/1	3/1.00
613218149002001	SA01700225ACAB1 004	04-24-86	1143	40.00	59.00	20	1	1.00
613218149003101	SA01700225ACBB1 005	04-23-86	1154	40.72	59.00	20	1	1.00
613224149002901	SA01700225ABCB1 003	04-23-86	1430	42.10	57.00	20	1	1.00
613235149472802	SB01700322DCDC2 009	04-28-86	1354	5.71	22.00	30	1	1.00
613235149473401	SB01700322DCCD1 008	04-28-86	1158	3.16	21.00	20	1	1.00
613239149471901	SB01700322DCAD1 007	04-28-86	1640	29.24	85.00	22	1	1.00
613243149472901	SB01700322DCAB1 006	04-28-86	1023	29.29	65.00	45	1	1.00
613531149122301	SA01700101CBBB1 010	04-24-86	1555	62.56	93.00	17	1	1.00
621014150065101	SB02400513BCDD1 003	04-30-86	1601	25.50	33.00	6	1	1.00
621019150070401	SB02400513BCCA1 002	05-01-86	1133	51.20	70.00	25	1	1.00
621026150065201	SB02400513BBDD1 001	04-30-86	1300	30.40	42.00	35	1	1.00
621745150041501	SB02400513BBDD1 001	04-30-86	1905	26.10	58.00	23	1	1.00
621749150042301	SB02600431DACD1 001	05-01-86	0856	28.30	42.00	39	1	1.00

STATION NUMBER	DATE	SAMPLE TREAT-MENT (00115)	FLOW RATE, INSTAN-TANEOUS (GPM) (00059)	SPE-CIFIC CON-DUCT-ANCE (US/CM) (00095)	PH (STAND-ARD UNITS) (00400)	TEMPER-ATURE (DEG C) (00010)	HARD-NESS (MG/L AS CACO3) (00900)	HARD-NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS-SOLVED (MG/L AS CA) (00915)	MAGNE-SIUM, DIS-SOLVED (MG/L AS MG) (00925)
613211149000901	04-24-86	--	--	--	7.50	--	200	18	67	8.1
613212149002801	04-23-86	4/1	E6.0	680	--	4.5	390	33	130	16
613218149002001	04-24-86	1	E6.0	850	6.70	4.0	480	12	160	20
613218149003101	04-23-86	1	E6.0	755	--	6.0	420	0	140	17
613224149002901	04-23-86	1	E8.0	510	7.00	4.0	280	29	96	10
613235149472802	04-28-86	1	E8.0	423	6.00	2.0	230	21	71	12
613235149473401	04-28-86	1	E6.0	395	6.20	2.5	160	15	41	13
613239149471901	04-28-86	1	5.0	600	--	4.0	380	19	130	14
613243149472901	04-28-86	1	E5.0	180	8.70	3.5	88	0	19	9.9
613531149122301	04-24-86	1	E5.0	295	--	3.0	160	2	47	9.2
621014150065101	04-30-86	1	8.0	98	5.60	5.0	34	0	10	2.3
621019150070401	05-01-86	1	E10	203	6.10	5.0	80	0	22	6.0
621026150065201	04-30-86	1	E0.8	261	6.00	6.0	110	0	32	8.2
621745150041501	04-30-86	1	E9.0	145	8.20	5.5	55	0	19	1.9
621749150042301	05-01-86	1	E9.0	120	6.60	4.5	45	0	15	1.9

STATION NUMBER	DATE	SODIUM, DIS-SOLVED (MG/L AS NA) (00930)	POTAS-SIUM, DIS-SOLVED (MG/L AS K) (00935)	ALKA-LINITY WH WAT TOTAL FIELD MG/L AS CACO3 (00410)	ALKA-LINITY, CARBON-ATE IT-FLD (MG/L - CACO3) (99430)	BICAR-BONATE IT-FLD (MG/L AS HCO3) (99440)	CAR-BONATE IT-FLD (MG/L AS CO3) (99445)	SULFATE DIS-SOLVED (MG/L AS SO4) (00945)	CHLO-RIDE, DIS-SOLVED (MG/L AS CL) (00940)	FLUO-RIDE, DIS-SOLVED (MG/L AS F) (00950)
613211149000901	04-24-86	6.2	0.80	183	183	--	--	33	6.0	<0.10
613212149002801	04-23-86	10	1.2	355	358	437	0	27	12	<0.10
613218149002001	04-24-86	8.6	1.2	469	470	574	0	18	16	<0.10
613218149003101	04-23-86	10	1.2	428	428	522	0	15	18	<0.10
613224149002901	04-23-86	7.3	1.0	251	252	307	0	44	7.3	<0.10
613235149472802	04-28-86	4.4	0.90	209	206	252	0	8.0	13	<0.10
613235149473401	04-28-86	3.1	0.60	141	141	172	0	34	19	<0.10
613239149471901	04-28-86	4.3	0.90	361	363	443	0	5.8	1.6	<0.10
613243149472901	04-28-86	6.5	1.1	100	99	116	2.0	6.1	0.80	0.10
613531149122301	04-24-86	4.5	1.0	152	153	186	0	13	1.8	0.20
621014150065101	04-30-86	2.4	1.3	40	40	48	0	2.0	4.0	<0.10
621019150070401	05-01-86	4.4	1.6	99	102	124	0	1.7	7.0	<0.10
621026150065201	04-30-86	5.2	2.1	120	121	148	0	7.2	9.4	<0.10
621745150041501	04-30-86	6.5	1.4	62	61	74	0	2.3	8.7	<0.10
621749150042301	05-01-86	5.6	1.3	49	50	61	0	3.0	6.7	<0.10

1/ TAP AWAY FROM WELL
2/ WELLHEAD
3/ TESTING
4/ RAW
E ESTIMATED

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

MATANUSKA-SUSITNA BOROUGH LANDFILL WELLS--Continued

STATION NUMBER	DATE	SILICA, DIS-SOLVED (MG/L AS SIO2) (00955)	SOLIDS, SUM OF CONSTI-TUENTS, DIS-SOLVED (MG/L) (70301)	NITRO-GEN, NO2+NO3 DIS-SOLVED (MG/L AS N) (00631)	PHOS-PHORUS, ORTHO, DIS-SOLVED (MG/L AS P) (00671)	CARBON, ORGANIC DIS-SOLVED (MG/L AS C) (00681)	CARBON, ORGANIC SUS-PENDED TOTAL (MG/L AS C) (00689)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)	CADMIUM TOTAL RECOV-ERABLE (UG/L AS CD) (01027)
613211149000901	04-24-86	7.8	240	0.590	<0.010	0.8	<0.1	--	<1	<1
613212149002801	04-23-86	12	420	0.160	<0.010	1.3	<0.1	--	2	<1
613218149002001	04-24-86	13	520	<0.100	<0.010	2.3	<0.1	--	7	<1
613218149003101	04-23-86	14	470	<0.100	<0.010	2.8	--	--	8	<1
613224149002901	04-23-86	9.6	330	0.770	<0.010	0.8	<0.1	--	<1	<1
613235149472802	04-28-86	19	250	1.00	<0.010	4.2	0.1	--	<1	<1
613235149473401	04-28-86	34	260	0.660	<0.010	10	0.1	--	18	<1
613239149471901	04-28-86	20	400	<0.100	<0.010	2.0	0.1	--	2	<1
613243149472901	04-28-86	11	120	<0.100	0.070	2.3	0.1	9.7	12	<1
613531149122301	04-24-86	9.7	180	<0.100	0.010	2.2	0.8	--	8	<1
621014150065101	04-30-86	17	66	0.160	<0.010	1.9	0.2	--	1	<1
621019150070401	05-01-86	37	150	<0.100	<0.010	1.3	0.2	--	2	<1
621026150065201	04-30-86	26	170	<0.100	<0.010	1.4	0.2	--	<1	<1
621745150041501	04-30-86	14	91	<0.100	0.050	1.0	0.1	--	9	<1
621749150042301	05-01-86	14	78	<0.100	<0.010	1.5	<0.1	--	2	<1

STATION NUMBER	DATE	CHRO-MIUM, TOTAL RECOV-ERABLE (UG/L AS CR) (01034)	COPPER, TOTAL RECOV-ERABLE (UG/L AS CU) (01042)	IRON, TOTAL RECOV-ERABLE (UG/L AS FE) (01045)	IRON, SUS-PENDED RECOV-ERABLE (UG/L AS FE) (01044)	IRON, DIS-SOLVED (UG/L AS FE) (01046)	LEAD, TOTAL RECOV-ERABLE (UG/L AS PB) (01051)	MANGA-NESE, DIS-SOLVED (UG/L AS MN) (01056)	MERCURY TOTAL RECOV-ERABLE (UG/L AS HG) (71900)	ZINC, TOTAL RECOV-ERABLE (UG/L AS ZN) (01092)
613211149000901	04-24-86	3	5	20	10	8	<1	<1	0.10	120
613212149002801	04-23-86	2	10	1600	920	680	<1	950	<0.10	20
613218149002001	04-24-86	3	11	1300	200	1100	<1	3000	<0.10	20
613218149003101	04-23-86	4	4	1500	400	1100	1	4	<0.10	20
613224149002901	04-23-86	4	11	640	590	55	<1	7	<0.10	20
613235149472802	04-28-86	3	15	1900	1600	310	1	150	<0.10	10
613235149473401	04-28-86	2	14	26000	0	26000	2	1900	<0.10	10
613239149471901	04-28-86	3	22	39000	38000	550	3	62	<0.10	30
613243149472901	04-28-86	7	11	610	560	50	1	34	<0.10	<10
613531149122301	04-24-86	22	50	57000	57000	320	22	96	<0.10	200
621014150065101	04-30-86	9	6	4600	2300	2300	<1	680	<0.10	10
621019150070401	05-01-86	6	7	10000	700	9300	2	350	<0.10	<10
621026150065201	04-30-86	14	5	13000	3800	9200	4	780	<0.10	<10
621745150041501	04-30-86	6	3	880	830	46	<1	130	<0.10	<10
621749150042301	05-01-86	12	7	1100	1100	28	4	9	<0.10	20

STATION NUMBER	DATE	DI-CHLORO-BROMO-METHANE TOTAL (UG/L) (32101)	CARBON-TETRA-CHLO-RIDE TOTAL (UG/L) (32102)	1,2-DI-CHLORO-ETHANE TOTAL (UG/L) (32103)	BROM-OFORM TOTAL (UG/L) (32104)	CHLORO-DI-BROMO-METHANE TOTAL (UG/L) (32105)	CHLORO-FORM TOTAL (UG/L) (32106)	PHENOLS TOTAL (UG/L) (32730)	TOLUENE TOTAL (UG/L) (34010)	BENZENE TOTAL (UG/L) (34030)
613211149000901	04-24-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<1	<3.0	<3.0
613212149002801	04-23-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<1	<3.0	<3.0
613218149002001	04-24-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<1	<3.0	<3.0
613218149003101	04-23-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	2	<3.0	<3.0
613224149002901	04-23-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<1	<3.0	<3.0
613235149472802	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<1	<3.0	<3.0
613235149473401	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	2	<3.0	<3.0
613239149471901	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	7	<3.0	<3.0
613243149472901	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<1	<3.0	<3.0
613531149122301	04-24-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	2	<3.0	<3.0
621014150065101	04-30-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<1	<3.0	<3.0
621019150070401	05-01-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<1	<3.0	<3.0
621026150065201	04-30-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<1	<3.0	<3.0
621745150041501	04-30-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<1	<3.0	<3.0
621749150042301	05-01-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<1	<3.0	<3.0

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA--Continued

MATANUSKA-SUSITNA BOROUGH LANDFILL WELLS--Continued

STATION NUMBER	DATE	CHLORO-BENZENE TOTAL (UG/L) (34301)	CHLORO-ETHANE TOTAL (UG/L) (34311)	ETHYL-BENZENE TOTAL (UG/L) (34371)	METHYL-BROMIDE TOTAL (UG/L) (34413)	METHYL CHLOR-IDE TOTAL (UG/L) (34418)	METHYL-ENE CHLO-RIDE TOTAL (UG/L) (34423)	TETRA-CHLORO-ETHYL-ENE TOTAL (UG/L) (34475)	TRI-CHLORO-FLUORO-METHANE TOTAL (UG/L) (34488)	1,1-DI-CHLORO-ETHANE TOTAL (UG/L) (34496)
613211149000901	04-24-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613212149002801	04-23-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	6.2
613218149002001	04-24-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	9.6
613218149003101	04-23-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	5.5
613224149002901	04-23-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613235149472802	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613235149473401	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613239149471901	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613243149472901	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613531149122301	04-24-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621014150065101	04-30-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621019150070401	05-01-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621026150065201	04-30-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621745150041501	04-30-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621749150042301	05-01-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0

STATION NUMBER	DATE	1,1-DI-CHLORO-ETHYL-ENE TOTAL (UG/L) (34501)	1,1,1-TRI-CHLORO-ETHANE TOTAL (UG/L) (34506)	1,1,2-TRI-CHLORO-ETHANE TOTAL (UG/L) (34511)	1,1,2,2 TETRA-CHLORO-ETHANE TOTAL (UG/L) (34516)	1,2-DI-CHLORO-BENZENE TOTAL (UG/L) (34536)	1,2-DI-CHLORO-PROPANE TOTAL (UG/L) (34541)	CHLORO-ETHYL-ENE TOTAL (UG/L) (34546)	1,3-DI-CHLORO-PROPANE TOTAL (UG/L) (34561)	1,3-DI-CHLORO-BENZENE TOTAL (UG/L) (34566)
613211149000901	04-24-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613212149002801	04-23-86	<3.0	5.1	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613218149002001	04-24-86	<3.0	5.7	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613218149003101	04-23-86	<3.0	7.8	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613224149002901	04-23-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613235149472802	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613235149473401	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613239149471901	04-28-86	<3.0	<3.0	<3.0	<3.0	<0.0	<3.0	<3.0	<3.0	<0.0
613243149472901	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613531149122301	04-24-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621014150065101	04-30-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621019150070401	05-01-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621026150065201	04-30-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621745150041501	04-30-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621749150042301	05-01-86	<3.0	<3.0	<3.0	<3.0	<0.0	<3.0	<3.0	<3.0	<0.0

STATION NUMBER	DATE	1,4-DI-CHLORO-BENZENE TOTAL (UG/L) (34571)	2-CHLORO-ETHYL-VINYL-ETHER TOTAL (UG/L) (34576)	DI-CHLORO-DI-FLUORO-METHANE TOTAL (UG/L) (34668)	TRANS-1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34699)	CIS 1,3-DI-CHLORO-PROPENE TOTAL (UG/L) (34704)	1,2-DIBROMO ETH-YLENE TOTAL (UG/L) (39082)	VINYL CHLO-RIDE TOTAL (UG/L) (39175)	TRI-CHLORO-ETHYL-ENE TOTAL (UG/L) (39180)	STYRENE TOTAL (UG/L) (77128)
613211149000901	04-24-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613212149002801	04-23-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613218149002001	04-24-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613218149003101	04-23-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613224149002901	04-23-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613235149472802	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613235149473401	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613239149471901	04-28-86	<0.0	<3.0	<3.0	<0.0	<0.0	<0	<3.0	<3.0	<0
613243149472901	04-28-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
613531149122301	04-24-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621014150065101	04-30-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621019150070401	05-01-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621026150065201	04-30-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621745150041501	04-30-86	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0
621749150042301	05-01-86	<0.0	<3.0	<3.0	<0.0	<0.0	<0	<3.0	<3.0	<0

WATER QUALITY DATA COLLECTED FROM WELLS DURING WATER YEAR 1986

YUKON ALASKA

FAIRBANKS AREA WELLS

STATION NUMBER	LOCAL IDENT- I- FIER	DATE	TIME	DEPTH BELOW LAND SURFACE (WATER LEVEL) (FEET) (72019)	DEPTH OF WELL, TOTAL (FEET) (72008)	PUMP OR FLOW PERIOD PRIOR TO SAM- PLING (MIN) (72004)	SAMPLE SOURCE (72005)	SAM- PLING CONDI- TION (72006)	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)
644728147243001	FD00100231AAAA1 001	09-19-86	1555	4.32	14.10	10	1/26	2/8.00	400
644822147283001	FD00100123DDDD1 001	09-19-86	1430	2.43	11.60	10	26	8.00	316
644917147322401	FD00100115CCCC1 001	09-19-86	1345	4.31	19.00	10	26	8.00	320

STATION NUMBER	DATE	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE, AIR (DEG C) (00020)	TEMPER- ATURE (DEG C) (00010)	BARO- METRIC PRES- SURE (MM OF HG) (00025)	OXYGEN, DIS- SOLVED (MG/L) (00300)	OXYGEN, DIS- SOLVED (PER- CENT SATUR- ATION) (00301)	BICAR- BONATE IT-FLD (MG/L AS HCO3) (99440)	SULFATE DIS- SOLVED (MG/L AS SO4) (00945)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)
644728147243001	09-19-86	6.30	13.0	6.0	763	2.4	19	244	11	1.8
644822147283001	09-19-86	6.90	16.5	11.0	763	2.7	24	248	13	1.3
644917147322401	09-19-86	6.55	18.5	8.0	764	5.2	44	172	18	14

STATION NUMBER	DATE	NITRO- GEN, NO2+NO3 TOTAL (MG/L AS N) (00630)	NITRO- GEN, AMMONIA TOTAL (MG/L AS N) (00610)	NITRO- GEN,AM- MONIA + ORGANIC DIS. (MG/L AS N) (00623)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS, ORTHO, TOTAL (MG/L AS P) (70507)	CARBON, ORGANIC TOTAL (MG/L AS C) (00680)	ARSENIC TOTAL (UG/L AS AS) (01002)	IRON, TOTAL RECOV- ERABLE (UG/L AS FE) (01045)	MANGA- NESE, TOTAL RECOV- ERABLE (UG/L AS MN) (01055)
644728147243001	09-19-86	<0.100	0.020	--	0.020	<0.010	9.7	3	1400	300
644822147283001	09-19-86	<0.100	0.130	<0.20	0.010	<0.010	7.1	4	5700	890
644917147322401	09-19-86	<0.100	0.630	<0.20	0.040	0.030	6.3	15	11000	760

1/ PUMP
2/ PUMPING

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WATER QUALITY DATA COLLECTED FROM SPRINGS DURING WATER YEAR 1986

SOUTH-CENTRAL ALASKA

POINT MACKENZIE AREA

STATION NUMBER	LOCAL IDENT- I- FIER	DATE	TIME	SPE- CIFIC CON- DUCT- ANCE (US/CM) (00095)	PH (STAND- ARD UNITS) (00400)	TEMPER- ATURE (DEG C) (00010)
612208150075201	SB01500526BBAB1S	10-07-85	1400	138	7.30	4.0
		01-21-86	1515	--	--	--
		05-22-86	1350	--	--	--

DATE	HARD- NESS (MG/L AS CACO3) (00900)	HARD- NESS NONCARB WH WAT TOT FLD MG/L AS CACO3 (00902)	CALCIUM DIS- SOLVED (MG/L AS CA) (00915)	MAGNE- SIUM, DIS- SOLVED (MG/L AS MG) (00925)	ALKA- LINITY LAB (MG/L AS CACO3) (90410)	CHLO- RIDE, DIS- SOLVED (MG/L AS CL) (00940)	SILICA, DIS- SOLVED (MG/L AS SIO2) (00955)	NITRO- GEN, NO2+NO3 DIS- SOLVED (MG/L AS N) (00631)
10-07-85	63	0	22	1.9	68	1.4	14	0.087
01-21-86	77	0	27	2.3	78	1.4	15	0.119
05-22-86	78	1	26	3.2	77	1.3	14	0.002

DATE	NITRO- GEN, AMMONIA DIS- SOLVED (MG/L AS N) (00608)	NITRO- GEN,AM- MONIA + ORGANIC TOTAL (MG/L AS N) (00625)	PHOS- PHORUS, TOTAL (MG/L AS P) (00665)	PHOS- PHORUS, DIS- SOLVED (MG/L AS P) (00666)	PHOS- PHORUS, ORTHO, DIS- SOLVED (MG/L AS P) (00671)	IRON, DIS- SOLVED (UG/L AS FE) (01046)	NITRO- GEN NITRATE DISSOLV (UG/L) (91003)	PHOS- PHORUS, ORTHO, DIS- SOLVED (UG/L AS P) (91004)
10-07-85	0.004	0.11	0.008	0.006	0.007	< 10	86.9	6.7
01-21-86	< 0.001	--	--	--	0.002	10	119	2.5
05-22-86	< 0.001	--	--	0.003	0.003	30	2.2	2.8

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☆ GPO - 592-327-95003

October 1, 1978

FACTORS FOR CONVERTING INCH-POUND UNITS TO INTERNATIONAL SYSTEM UNITS (SI)

The following factors may be used to convert the inch-pound units published herein to the International System of Units (SI). This report contains both the inch-pound and SI unit equivalents in the station manuscript descriptions.

Multiply inch-pound units	By	To obtain SI units
	Length	
inches (in)	$2.54x10^{1}$	millimeters (mm)
	$2.54x10^{-2}$	meters (m)
feet (ft)	$3.048x10^{-1}$	meters (m)
miles (mi)	$1.609x10^{0}$	kilometers (km)
	Area	
acres	$4.047x10^{3}$	square meters (m^2)
	$4.047x10^{-1}$	square hectometers (hm^2)
	$4.047x10^{-3}$	square kilometers (km^2)
square miles (mi^2)	$2.590x10^{0}$	square kilometers (km^2)
	Volume	
gallons (gal)	$3.785x10^{0}$	liters (L)
	$3.785x10^{0}$	cubic decimeters (dm^3)
	$3.785x10^{-3}$	cubic meters (m^3)
million gallons	$3.785x10^{3}$	cubic meters (m^3)
	$3.785x10^{-3}$	cubic hectometers (hm^3)
cubic feet (ft^3)	$2.832x10^{1}$	cubic decimeters (dm^3)
	$2.832x10^{-2}$	cubic meters (m^3)
cfs-days	$2.447x10^{3}$	cubic meters (m^3)
	$2.447x10^{-3}$	cubic hectometers (hm^3)
acre-feet (acre-ft)	$1.233x10^{3}$	cubic meters (m^3)
	$1.233x10^{-3}$	cubic hectometers (hm^3)
	$1.233x10^{-6}$	cubic kilometers (km^3)
	Flow	
cubic feet per second (ft^3/s)	$2.832x10^{1}$	liters per second (L/s)
	$2.832x10^{1}$	cubic decimeters per second (dm^3/s)
	$2.832x10^{-2}$	cubic meters per second (m^3/s)
gallons per minute (gal/min)	$6.309x10^{-2}$	liters per second (L/s)
	$6.309x10^{-2}$	cubic decimeters per second (dm^3/s)
	$6.309x10^{-5}$	cubic meters per second (m^3/s)
million gallons per day	$4.381x10^{1}$	cubic decimeters per second (dm^3/s)
	$4.381x10^{-2}$	cubic meters per second (m^3/s)
	Mass	
tons (short)	$9.072x10^{-1}$	megagrams (Mg) or metric tons

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